



U.S. DEPARTMENT OF EDUCATION

Academic Competitiveness and SMART Grant Programs: First-Year Lessons Learned

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Academic Competitiveness and National SMART Grant Programs: First-Year Lessons Learned

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For:

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Executive Summary

Background

The *Higher Education Reconciliation Act of 2005* created two new grant programs for undergraduates: the Academic Competitiveness Grant (ACG) program and the National Science and Mathematics Access to Retain Talent (National SMART) Grant program. The ACG program is intended to encourage students to take challenging courses in high school and thus increase their likelihood of success in college. The National SMART Grant program is intended to encourage students to pursue college majors considered in high demand in the global economy (mathematics, science, engineering, technology, and languages deemed critical to the national interest).

To be eligible for an ACG or National SMART Grant, a student had to qualify for a Federal Pell Grant, enroll full-time in a degree program at a two- or four-year institution of higher education, and be a U.S. citizen. First-year students who met these conditions, graduated from high school after Jan. 1, 2006, and completed a rigorous high school program (as defined by the U.S. Department of Education) could receive an ACG up to \$750 (depending on their financial need). Second-year students could receive up to \$1,300 if they graduated from high school after Jan. 1, 2005, met all the other conditions for an ACG, and had a cumulative grade point average (GPA) of at least 3.0¹ at the end of their first year of college. National SMART Grants worth up to \$4,000 are available to third- and fourth-year students who are majoring in mathematics, science (physical, life, or computer), engineering, technology, or certain foreign languages considered critical to the national interest² and who maintain a cumulative GPA of at least 3.0.

With the passage of the *Ensuring Continued Access to Student Loans Act of 2008* (H.R. 5715), eligibility for the programs has been expanded. Specifically, part-time students and noncitizen permanent residents will be able to receive ACGs and National SMART Grants starting in Jan. 2009, and students in certificate programs lasting a year or more at a degree-granting institution will be able to receive ACGs. However, the *Higher Education Opportunity Act of 2008* (H.R. 4137), enacted in August 2008, delayed implementation of these changes and gave states increased control over defining rigorous secondary school programs of study. This report describes implementation and participation patterns under the original eligibility conditions.

² Appendix A includes a complete list of eligible majors.

¹ On a 4.0 scale or the numeric equivalent.

If the new grant programs are successful, more low-income students will complete rigorous high school programs, enroll in college full-time, and earn degrees, and more students will major in mathematics, science, engineering, technology, and critical languages. The U.S. Department of Education has encouraged states, school districts, and schools to take steps to promote rigorous course-taking and to establish efficient mechanisms for verifying students' eligibility for the grants. Congress provided \$790 million for ACGs and National SMART Grants for 2006–07 and \$4.5 billion over five years. The programs will end after the 2010–11 academic year unless reauthorized.

Approximately 300,000 ACGs and 60,000 National SMART Grants were awarded in the 2006–07 academic year, compared with the Department's initial estimates of 425,000 ACGs and 80,000 National SMART Grants. Whether the shortfall was due to an overestimate of the number of eligible students, difficulties associated with the rapid implementation of a complex program, or both is difficult to assess. The Department's goal is to double participation by 2010–11.

MPR Associates and JBL Associates are assisting the Department of Education in evaluating the ACG and National SMART Grant programs. Because the programs were announced in May 2006 and the first awards made for the 2006–07 academic year, it is too soon to answer the most important questions that the Department has posed for this multiyear study:

- Will the financial incentives provided by the ACG program induce more economically disadvantaged high school students to complete a rigorous high school program and enroll and succeed in postsecondary education?
- Will the availability of National SMART Grants motivate more students to major and receive degrees in mathematics, science, engineering, technology, and critical languages?

Students currently in their final years of high school simply may not have enough time left to take all the required courses, and students about to enter their third and fourth years of college may be well-established in other majors and not have the foundation needed to switch to one of the qualifying majors even if they wanted to. First-year activities therefore focused on the following:

 Identifying and describing implementation issues from the perspective of major stakeholders by conducting interviews, reviewing documents, and monitoring stakeholder Web sites.

³ Chapter 6 of this report contains the Department's specific recommendations.

⁴ Federal Register Vol. 71, No. 127, p. 37998.

- Comparing information on the state-specific rigorous high school programs approved by the secretary of education and on state high school graduation requirements.
- Examining 2006–07 participation in the programs overall, across states, by student characteristics, and (for National SMART Grants) by field of study using the COD-CPS Interface Grant Recipient File maintained by the Office of Federal Student Aid.
- Analyzing historical data to determine national trends in high school coursetaking and to develop estimates of eligibility for ACGs and National SMART Grants. This baseline information—obtained from the National Assessment of Educational Progress (NAEP), Education Longitudinal Study of 2002 (ELS), Beginning Postsecondary Student Aid Studies (BPS), National Postsecondary Student Aid Studies (NPSAS), and the Integrated Postsecondary Education Data System (IPEDS)—will provide a benchmark against which to examine current and future participation in the ACG and National SMART Grant programs.
- Summarizing Department of Education and stakeholder recommendations for improving the programs.

This report summarizes the findings of these activities and presents recommendations developed by the Department of Education and stakeholders to increase participation. Updates to this report will be provided after years two and three, and a final report on outcomes and impact prepared after the fourth year of the programs (2009–10). The impact of the programs will be evaluated as data become available. Multivariate analyses will be employed to the extent feasible, focusing on longitudinal state data.

Summary of Major Findings

First-Year Implementation Concerns

• Although stakeholders applaud the intent of the programs, many were frustrated by the administrative burdens put on institutions and staff and the lack of awareness and confusion about the ACG and National SMART Grant programs. Some difficulties were eased during the first implementation year as the Department clarified language in the regulations, such as how to compute grade point averages (GPAs), how academic year is defined, and methods for establishing a student's academic major. Nevertheless, some concerns remain, including the need to base ACG awards on students' four-year high school transcripts (which colleges do not always have) and difficulties associated with verifying the completion of a rigorous high school program.

 Successful implementation of the programs (especially ensuring that students are well-informed) will require cooperation and coordination across high school and postsecondary education. High school counselors, college academic advisors, and financial aid administrators interviewed for this report all commented on the lack of awareness and the need for better coordination among these groups of professionals.

State Definitions of Rigorous High School Programs

• For the first year of the ACG program, the U.S. secretary of education approved as rigorous at least one advanced, honors, or other program in 40 states and approved more than one program in 22 states. The content of these programs varied widely. Some appeared to be more demanding than the Department of Education (ED) course-based curriculum, some appeared to be less demanding, and some were difficult to compare.

First-Year Participation

- First-year participation was lower than expected for both ACGs and National SMART Grants (about 300,000 ACGs and 60,000 National SMART Grants, compared with the 425,000 and 80,000 initially estimated). It is difficult to know whether this is due to inaccurate estimates of the number eligible, implementation issues, lack of knowledge about the programs, or all of the above.
- At four-year institutions, the percentage of first- and second-year Pell Grant recipients that received an ACG ranged from a high of 32 percent (for Massachusetts residents) to a low of 4 percent (for Alaska residents). At two-year institutions, the rate varied from 6 percent (for Oklahoma and Florida residents) to less than 1 percent in six states.
- About one-quarter of all first- and second-year Pell Grant recipients received an ACG at public and private nonprofit four-year institutions, but only 3 percent did so at public two-year institutions, at which students are more likely to enroll parttime and are less likely to be well-prepared academically.
- About three-quarters of ACG recipients were first-year students, suggesting that second-year students had difficulty meeting the 3.0 GPA requirement (the only difference in the requirements for first- and second-year awards).
- Five percent of Pell Grant recipients in both the third and fourth years received a National SMART Grant.
- Participation rates for the National SMART Grant program also varied (from 2 percent in the District of Columbia to 14 percent in Utah). There did not appear to be any systematic relationship between the National SMART Grant participation

rate at institutions in a state and the percentage of bachelor's degrees awarded in National SMART Grant-eligible fields in that state. In other words, a state's rate cannot be explained simply by the proportion of students majoring in eligible fields in that state.

- Although all recipients were from lower-income families, ACG recipients tended
 to come from families with higher incomes than those who received only Pell
 Grants. Students with Expected Family Contributions (EFCs) of 0 received 46
 percent of all Pell Grant dollars awarded, but only 32 percent of ACG dollars. The
 family income of dependent students with National SMART Grants was also
 somewhat higher than that of those who received only Pell Grants.
- About half of all participating institutions awarded fewer than 50 ACG Grants, and about one-third awarded fewer than 10 National SMART Grants.
- Students with a major in the life sciences had the largest share of National SMART Grants (38 percent).

Historical Information: Trends in High School Course-taking

- States have been raising high school graduation standards and are continuing to
 do so, with numerous changes planned for the next few years. These efforts
 encourage more rigorous course-taking and may promote increased eligibility for
 ACGs regardless of any other initiatives, but they confound efforts to isolate the
 impact of the ACG program on course-taking.
- The percentage of high school graduates completing a rigorous high school program has increased over time. About half of all high school graduates now complete the ED course-based rigorous curriculum, but low-income students are less likely than others to do so. The same is true even when the comparison is limited to those who enroll in college full-time right after high school, although the gap is less pronounced for this group.

Historical Information: Estimates of Eligibility

- Based on analysis of historical data, 13 percent of first-time, first-year students would have been eligible for an ACG in 2003–04, which is almost double the percentage that would have been eligible in 1995–96 (7 percent) had the program existed in those years. In contrast, the percentage of undergraduates in the third year or above that would have been eligible for a National SMART Grant remained stable at 2 percent.
- The academic requirement for the ACG appears difficult to meet. Most undergraduates are U.S. citizens and most recent high school graduates enrolled full-time in college, but barely half of those meeting these eligibility criteria also

took the required courses. Taking science courses and a language other than English were the most difficult requirements to meet.

Historical Information: Trends in National SMART Grant-eligible Majors

• The proportion of all bachelor's degrees awarded in National SMART Granteligible fields has remained stable—about 15 percent since 1995–96.

Summary of Department of Education and Stakeholder Recommendations

- To increase the number of students qualified for grants, the Department has asked states to commit to doubling the number of grant recipients by 2010–11. To achieve this goal, the Department has urged high school and postsecondary stakeholders to know their states' approved rigorous curricula, advocate for initiatives to increase low-income students' access to rigorous course work and National SMART Grant-eligible majors, and support efforts to increase awareness of the grant programs.
- To improve the identification of students eligible for grants, the Department has suggested strategies such as developing a core high school curriculum for college admissions that meets ACG eligibility requirements; having states provide colleges with lists of students receiving recognition through programs that make them potentially eligible for an ACG; and having institutions review the transcripts of all Pell Grant recipients to ensure that eligible students are not overlooked.
- To reduce the administrative burden on high schools and postsecondary institutions, stakeholders offered recommendations similar to those of the Department but also called for additional assistance in devising and applying solutions. They recommend improved collaboration on marketing the ACG and National SMART Grant programs; training and workshops for financial aid administrators, college registrars, academic advisors, and high school guidance and college counselors; and better communication between high school and college counselors.

CHAPTER 1

Introduction

Background

The *Higher Education Reconciliation Act of 2005* created two new grant programs for undergraduates: the Academic Competitiveness Grant (ACG) program and National Science and Mathematics Access to Retain Talent (National SMART) Grant program. The ACG program is intended to encourage students to take challenging courses in high school and thus increase their likelihood of success in college. The National SMART Grant program is intended to encourage students to pursue certain college majors considered in high demand in the global economy (mathematics, science, engineering, technology, and certain languages deemed critical to the national interest). Congress provided \$790 million for the 2006–07 academic year for these new programs, and \$4.5 billion over five years. The programs will end after the 2010–11 academic year unless reauthorized so it is important to know soon whether the programs are having the desired effect and if there are any unintended consequences that should be addressed.

To be eligible for an ACG or National SMART Grant, a student had to qualify for a Federal Pell Grant, enroll full-time in a degree program at a two- or four-year institution of higher education, and be a U.S. citizen. First-year students who met these conditions, graduated from high school after Jan. 1, 2006, and completed a rigorous high school program (as defined by the U.S. Department of Education)⁵ could receive an ACG up to \$750 (depending on their financial need). Second-year students could receive up to \$1,300 if they graduated from high school after Jan. 1, 2005, met all the other conditions for an ACG, and had a cumulative grade point average (GPA) of at least 3.0⁶ at the end of their first year of college. National SMART Grants worth up to \$4,000 are available to third- and fourth-year students who are majoring in mathematics, science (physical, life, or computer), engineering, technology, or certain foreign languages considered critical to the national interest and who maintain a cumulative GPA of at least 3.0.⁷

With the passage of the *Ensuring Continued Access to Student Loans Act of 2008* (H.R. 5715), eligibility for the programs has been expanded. Specifically, part-time students and noncitizen permanent residents will be able to receive ACGs and National SMART Grants starting in January 2009, and students in certificate programs lasting a year or more at a degree-granting

⁵ Rigorous programs are described in Chapter 3.

⁶ On a 4.0 scale or the numeric equivalent.

⁷ Appendix A includes a complete list of eligible majors.

institution will be able to receive ACGs. The *Higher Education Opportunity Act of 2008* (H.R. 4137) (HEOA) delayed enactment of the expanded eligibility until July 2009.

Implementation

To facilitate a quick and smooth implementation of the ACG program, the secretary of education provided four ways for students to satisfy the "rigorous high school program" requirement for the first two years of the program (2006–07 and 2007–08). The secretary also stated that she intended to raise the standard in the future and define a set of requirements later that more accurately reflects what is required for success in college.⁸

Beginning July 1, 2006, Pell Grant recipients who met the nonacademic requirements (based on their financial aid application) were notified by mail or e-mail that they might be eligible for an ACG or National SMART Grant if they met the academic requirements. Students were required to self-identify their potential eligibility, which their institutions then verified before the awards were made. Students applying for financial aid after July 1, 2006, were able to self-identify when they filled out their financial aid application by answering a series of questions about their high school course-taking.

The first ACGs and National SMART Grants were awarded for the 2006–07 academic year. The Department of Education issued Interim Regulations for the new grant programs in July 2006, engaged in negotiations for establishing rules during the summer of 2007, and issued Final Regulations in October 2007. Because of the rapid implementation of the programs—the procedures for implementing the programs were announced in May 2006 and the first grants awarded for fall 2006—and the complexities surrounding the details of the eligibility criteria, it was inevitable that implementation would present some administrative difficulties (discussed in Chapter 2).

Approximately 300,000 ACGs and 60,000 National SMART Grants were awarded in the 2006–07 academic year, compared with the Department's initial estimates of 425,000 ACGs and 80,000 National SMART Grants. Whether the shortfall was due to an overestimate of the number of eligible students, difficulties associated with the rapid implementation of a complex program, or both is difficult to assess. The Department of Education has set a goal to double participation by 2010–11, urging states, colleges, and high schools to promote ACGs and National SMART Grants because completing a rigorous high school program is the best way to increase college readiness, reduce remediation, and increase college completion rates for low-

⁹ Federal Register, Vol. 71, No. 127, p. 37998.

⁸ Policy Letter signed by the Secretary Margaret Spellings, May 2, 2006: http://www.ed.gov/policy/highered/guid/secletter/060502.html (accessed Jan. 22, 2008).

income students, and increased postsecondary attainment will help the United States compete in the 21st century.¹⁰

Expected Program Outcomes

If the new grant programs are successful over time, they will bring about an increase in the percentage of low-income students who earn college degrees and encourage more students to major in mathematics, science, engineering, technology, and critical languages. More specifically, over time, increasing numbers of low-income high school students will

- complete a rigorous high school program;
- learn about the ACG and National SMART Grant programs;
- respond to that knowledge and enroll full-time in a degree program;
- receive an ACG for their first year;
- earn a 3.0 GPA in their first year of college;
- continue to enroll full-time in their second year and have their grants renewed;
- select a major in a National SMART Grant-eligible field;
- enroll full-time and receive a National SMART Grant;
- earn a 3.0 GPA in their third year; and
- continue to enroll full-time in their fourth year and have their grants renewed.

Assuming this type of success, the gaps in the college enrollment, persistence, and completion rates of low-income and other students should narrow over time. In terms of the proportion of Pell Grant recipients receiving an ACG, one would expect to see the highest rates in states with high standards for high school diplomas and in which the honors programs have rigorous course requirements that match or exceed the minimum requirements for admission to a four-year college. One would also expect to find high rates in states with effective college awareness programs and in states and colleges with administrative procedures that make it easy to identify and verify eligible students.

It will take some time for the full effect of the new grant programs to be realized because students currently in their final years of high school simply may not have enough time left to take all the required courses. ¹¹ In addition, students about to enter their third and fourth years of

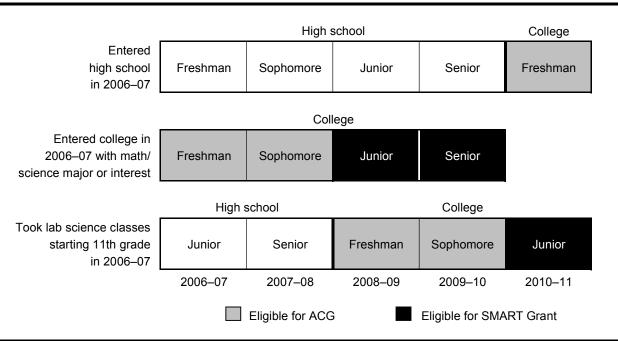
¹⁰ U.S. Department of Education: http://www.ed.gov/programs/smart/performance.html (accessed Aug. 25, 2008).

¹¹ A recent analysis of high school transcripts in California indicates that students who do not start preparing for college in ninth grade have a difficult time catching up (Finkelstein and Fong 2008).

CHAPTER 1. INTRODUCTION

college may be well-established in other majors and not have the foundation needed to switch to one of the qualifying majors even if they wanted to do so. To illustrate the length of time it will take to see the impact of the new grant programs, Figure 1 details the progression of three hypothetical cohorts. The first cohort consists of students entering high school the same year the grants were announced (2006–07) and therefore in a position to pursue a rigorous curriculum from the start. Even if students in this cohort were aware of the ACGs and motivated by them to start a rigorous high school program, the effect on ACG participation rates would not be noticed until at least 2010–11, when these students are college freshmen. The second cohort consists of students who entered college in 2006–07 and might have been motivated by the prospect of getting a National SMART Grant to enroll in a National SMART Grant-eligible major. These students would not receive their first National SMART Grant until 2008–09, three years into the program. Finally, the third cohort consists of high school students who might have been motivated by the National SMART Grant program to enroll in rigorous science courses in 11th grade. These students would not be eligible for their first National SMART Grant until 2010–11.

Figure 1. Hypothetical cohort progression and timing of eligibility for ACGs or SMART Grants



Purpose of the Study

MPR Associates and JBL Associates are assisting the Department of Education in evaluating the ACG and National SMART Grant programs during the first four years (through 2009–10). Through this study, the Department seeks answers to the following questions:

- What lessons can be learned from the early implementation of the program that will lead to program improvement? Are there identifiable unintended consequences?
- How do states differ in their definitions of "rigorous secondary school program of study," and do states differ in the rate at which Pell Grant recipients complete the course work required under these definitions to qualify for an ACG or major in the specified fields to qualify for a National SMART Grant?
- Do financial incentives induce more economically disadvantaged high school students to complete a rigorous program of study and to enroll and succeed in postsecondary education? What is the gap between students in lower- and higher-income families in meeting the standards of the ACGs and National SMART Grants? Will this gap be narrowed?
- Is the availability of National SMART Grants associated with an increase in the proportion of Pell Grant recipients who major in and receive degrees in mathematics, science, engineering, technology, and critical languages? If so, will this affect the overall number of majors in these fields nationally? How do Pell Grant recipients with National SMART Grants differ from those without them?

This report synthesizes information gathered during the first year of the study, which covers the first year that grants were awarded (2006–07). It is too early to measure the impact of the program on student behavior or outcomes such as high school course-taking, enrollment, and completion, or to examine whether the National SMART Grants provide students with an incentive to major in mathematics and science. Therefore, first-year activities focused on the following:

- Identifying and describing implementation issues from the perspective of major stakeholders by conducting interviews, reviewing documents, and monitoring stakeholder Web sites (Chapter 2).
- Comparing information on the state-specific rigorous high school programs approved by the secretary of education and on state high school graduation requirements (Chapter 3).

- Examining 2006–07 participation in the programs overall, across states, by student characteristics, and (for National SMART Grants) by field of study using the COD-CPS Interface Grant Recipient File maintained by the Office of Federal Student Aid (Chapter 4).
- Analyzing historical data to determine national trends in high school course-taking and develop estimates of eligibility for ACGs and National SMART Grants (Chapter 5). This baseline information—obtained from the National Assessment of Educational Progress (NAEP), Education Longitudinal Study of 2002 (ELS), Beginning Postsecondary Student Aid Studies (BPS), National Postsecondary Student Aid Studies (NPSAS), and the Integrated Postsecondary Education Data System (IPEDS)—will provide a benchmark against which to examine current and future participation in the ACG and National SMART Grant programs.
- Summarizing Department of Education and stakeholder recommendations for improving the programs (Chapter 6).

This report summarizes the findings of these activities and presents recommendations designed to increase participation. Updates to this report will be provided after years two and three, and a final report on outcomes and impact will be prepared after the fourth year of the programs (2009–10). In addition to the annual data on participation presented here, several new data sources will be available to inform the study questions. The 2007–08 National Postsecondary Student Aid Study (NPSAS:08), conducted by the National Center for Education Statistics, is currently collecting information from students on their knowledge of the ACG and National SMART Grant programs and whether these programs influenced their behavior. ¹² In addition, the research team will be analyzing student-level data from several states to examine changes in high school course-taking and transition to college. The impact of the programs will be evaluated as data become available. Multivariate analyses will be employed to the extent feasible, focusing on longitudinal state data.

¹² These data will be available in 2009.

CHAPTER 2

Early History of the ACG and National SMART Grant Legislation and Implementation Concerns

In spring 2006, the Academic Competitiveness Grant (ACG) and National Science and Mathematics Access to Retain Talent (National SMART) Grant legislation was drafted, passed by Congress, and signed into law. Congress allocated funding to be used to support incoming and continuing students for the 2006–07 academic year. As processing of financial aid applications typically begins in January, the timing of this legislation posed significant challenges for the U.S. Department of Education, colleges and universities, students and their families, and other stakeholders. Within a very short time period, the Department notified the public of this new source of potential financial aid; provided guidance and Interim Regulations to schools; set up processes to disburse funds to schools; worked with stakeholders to develop Final Regulations for 2006–07; and began the process of establishing regulations for subsequent years. The Department of Education engaged in extensive outreach efforts. Postsecondary institutions worked to identify eligible students and award these new grants, despite concerns about the administrative burdens created by new requirements. Amidst all the changes, funding allocated by Congress for the 2006–07 school year was awarded.

This chapter addresses the following topics:

- Intent and history of the legislation, from passage through the 2006–07 school year (which is the focal point of the empirical work presented in this report), and subsequent changes in the legislation that will affect program operations in future years;
- Sources of information used to identify program modifications in the passage, implementation, and revision of the legislation;
- Changes in the implementation of the legislation—including notifying institutions and students about these new funding sources, developing Interim and Final Regulations, working with stakeholders, and disbursing the funds to institutions to award to eligible students; and
- Salient concerns that arose that affected the initial awards in the 2006–07 school year, and how they were resolved.

Information on the history and implementation of the ACG/National SMART Grant legislation and regulations during this initial period was collected in fall 2006 from experts representing key stakeholder organizations. During that same time, relevant documents were reviewed (including legislation, regulations, comments elicited in the negotiated-rulemaking sessions held in early 2007, and stakeholder Web sites) to gain a better understanding of the following:

- How implementation had progressed, primarily at the postsecondary level;
- How effective were marketing efforts targeted at postsecondary institutions, stakeholder organizations, students, and parents; and
- Whether and how stakeholder concerns were resolved, and in what ways.

Intent, Goals, and History of the ACG and National SMART Grant Legislation

The *Higher Education Reconciliation Act of 2005* (P.L. 109-171) (the act) established the Academic Competitiveness Council (ACC) and created the Academic Competitiveness and National SMART Grants. The legislation was drafted quickly, in a matter of days, without public hearings. Section 401A, Academic Competitiveness Grants, as drafted and enacted by Congress, was intended to

- Encourage and support states as they make high school a more rigorous, challenging, and relevant experience for all students;
- Provide merit-based financial aid to low-income students;
- Encourage students to take more challenging courses in high school, making success in college more likely, according to research; and
- Encourage students to pursue college majors in high demand in the global economy, such as science, mathematics, technology, engineering, and critical foreign languages.

After the ACG and National SMART Grant programs were enacted, the Department of Education quickly undertook a series of actions to notify the public and institutions of the new legislation, to issue Interim Regulations, and to set up the mechanisms to disburse funds. There was very little time between the enactment of the programs in February and the fall academic terms when students were to receive financial aid. This compressed timeframe required the interim rules to be developed outside the normal "negotiated-rulemaking" process for drafting federal regulations. The interim rules were to be in effect for only the first two years. The Department issued these interim final rules, on which public comment was invited, for the new grant programs in July 2006. The Department also issued a series of "Dear Colleague" letters to

address specific concerns. It issued Final Regulations for 2006–07 in November 2006, after the term had started and schools had already made awards to students based on the previous guidance available to them. The program continued to evolve as the Department responded to additional questions from stakeholders and as Congress revised the legislation twice.

Table 1 presents a summary of critical steps in the development of the legislation, regulations, and the Department of Education's guidance in interpreting the regulations, beginning with the key legislative provisions. Appendix B offers a longer and more detailed summary of the history of the legislation, guidance, and regulations.

Table 1. Summary of the legislation, regulations, and the Department of Education's guidance in interpreting the regulations

Date	Provisions
Feb. 1, 2006	Congress passes the Higher Education Reconciliation Act of 2005 as part of the Deficit Reduction Act of 2005.
Feb. 8, 2006	President Bush signs <i>Higher Education Reconciliation Act of</i> 2005 into law.
April 5, 2006	The U.S. Department of Education explains the process for administering grants to institutions of higher education through a letter posted on the Department's Web site.
May 2, 2006	The U.S. Department of Education announces guidelines on how students become eligible—having successfully completed a rigorous high school program of study and specific majors.
June 1, 2006	Deadline for states to establish and submit to the secretary of education an alternate rigorous high school program of study for recognition in the 2006–07 academic year.
July 3, 2006 Effective 2006–07 academic year	Interim Final Regulations are posted in the <i>Federal Register</i> —addressing mandatory participation, definition of "academic year," and definition of GPA.
July 3–Aug. 17, 2006	Comment period on Interim Final Regulations.
Oct. 20, 2006	"Dear Colleague" letter on academic year.
Nov. 1, 2006	Deadline for states to establish and submit to the secretary of education additional rigorous high school programs of study for recognition in the 2007–08 academic year.
Nov. 1, 2006	Final Regulations published, in response to comments.
Effective 2007–08 academic year	
February-April 2007	Negotiated rulemaking sessions.

Cont'd. next page.

Table 1. Summary of the legislation, regulations, and the Department of Education's guidance in interpreting the regulations—Continued

Oct. 29, 2007	Final Regulations published, as amended by the secretary.
Effective July 1, 2008—but could be implemented on or after Nov. 1, 2007	
May 7, 2008	H.R. 5715 passed by House and Senate; signed into law by
Effective Jan. 1, 2009	President Bush.
Aug. 14, 2008	H.R. 4137: The Higher Education Opportunity Act of 2008
	(HEOA) enacted and reauthorized the Higher Education Act of 1965 (HEA).

Complex Requirements and Rapid Implementation

The complex requirements and rapid implementation of the ACG and National SMART Grant programs in the compressed first year created difficulties for all parties. Within this short time period, the Department of Education had to notify the public of this new potential source of financial aid; provide guidance and interim regulations to inform schools about how to award the 2006–07 funding and how to assess students' ongoing eligibility; set up processes to disburse funds to schools; work with stakeholders to develop final regulations for 2006–07; and begin the process of establishing regulations for subsequent years.

In addition to the regulations and guidance provided (as detailed in Appendix B), the Department tracked its own marketing efforts and reported that in this initial period it offered:

- Webinars on ACG and National SMART Grants, reaching 4,505 online attendees;
- In-person training on ACG and National SMART Grants at locations around the country, with 2,913 attendees;
- Presentations at conferences of campus financial aid and campus fiscal officers—approximately 30 were given, with a total of more than 5,000 attendees;
- Two Federal Student Aid Conferences with a total of more than 5,000 attendees; and
- Ongoing Web training sessions during which financial aid administrators could access the training on the Department's Web site at anytime.

Because the legislation arrived just as postsecondary schools were reviewing applications for college admission and financial aid, schools had little time to add or adapt processes to permit them to review student college applications; create financial aid packages that included ACGs and National SMART Grants for potentially eligible students; verify initial student eligibility for

CHAPTER 2. EARLY HISTORY OF THE ACG/NATIONAL SMART GRANT LEGISLATION AND IMPLEMENTATION CONCERNS

the ACG and National SMART Grant programs; disburse grants to students; and consider how to track student progress and ongoing eligibility for further funding.

States (and in some cases, school districts) had to consider whether they wanted to submit potential "rigorous programs of study" for consideration in 2007–08, high schools had to provide documentation (usually transcripts), and postsecondary institutions had to verify that students had taken the courses (or tests) to meet the criteria for a rigorous program of study—as defined by the secretary or by the state.

Students, their families, and their advisors had to get information about the new ACG and National SMART Grant programs; assess their own eligibility, given their financial need and differing possible ways to qualify for the "rigorous program of study" requirement; and initially apply for Federal Pell and ACG or National SMART Grant funding in conjunction with their college applications.

With different perspectives, needs, and tasks, stakeholders disagreed on many key issues. The timing of the new law, and the need to quickly process complex information, created additional stress. As financial aid awards are critical in determining where students choose to enroll, some institutions were placed in the position of creating financial aid packages without knowing whether a student actually would end up qualifying for an ACG program. And if the award process, confirmation of eligibility, and disbursement of funds were complex, then any subsequent auditing could be expected to be as complex, if not more so.

Stakeholders' Perspectives

Interviews were conducted in fall 2006 with experts from key stakeholder organizations. Documentation and feedback from the negotiated-rulemaking sessions held in early 2007¹³ and from stakeholder Web sites were collected and examined. Stakeholders were selected based on their role in implementing the ACG and National SMART Grant programs during the first award year. These stakeholders include a mix of representatives from high school and postsecondary organizations and offer a range of perspectives and insights into the regulatory and implementation problems posed by these two grant programs (Table 2).

¹³ "Negotiated rulemaking" (*Administrative Procedures Act*, 5 U.S.C. §§ 561–570) is a process in which different interest groups come together to negotiate the terms of an administrative rule and propose changes. It is entirely voluntary and the agency does not have to adopt the changes suggested by the advisory committee. The Department held four regional sessions in fall 2006 that helped create the agenda for the three ACG and National SMART Grant negotiated-rulemaking sessions that took place in spring 2007. Comments on the negotiated-rulemaking process and the subsequent Notice of Proposed Rulemaking can be found at http://www.regulations.gov/search/index.jsp.

Table 2. Stakeholder organizations relevant to the ACG and National SMART Grant programs

Organization	Stakeholder Role	
Postsecondary Institutions		
American Association of Collegiate Registrars and Admissions Officers	Represents administrators at postsecondary institutions	
American Association of Community Colleges	Represents public two-year institutions	
American Association of State Colleges and Universities	Represents some state postsecondary institutions	
American Association of University Professors	Represents professors at some universities	
American Conference of Academic Deans	Represents deans at all postsecondary institutions	
American Council on Education	Represents U.S. higher education institutions	
Association of American Universities	Includes 60 American universities	
Association of Community College Trustees	Represents community college trustees	
Career College Association	Represents proprietary postsecondary institutions	
National Academic Advising Association	Includes all postsecondary institutions	
National Association of College and University Business Officers	Represents business officers at all postsecondary institutions	
National Association of Independent Colleges and Universities	Represents some independent institutions	
National Association of State Student Grant and Aid Programs	Represents state agencies responsible for state-funded student aid programs	
National Association of State Universities and Land-Grant Colleges	Represents state universities and land-grant colleges	
National Association of Student Financial Aid Administrators	Includes all postsecondary institutions	
The Council for Opportunity in Education and The Pell Institute	Represents TRIO programs and some Educational Opportunity Programs	
United States Student Association	Represents students	
Elementary and High Schools		
American School Counselor Association	Includes elementary, middle and high school, and college counselors	
National Association for College Admission Counseling	Represents high school and college counselors	
National Association of Secondary School Principals	Includes middle and high school principals	
National Council of Teachers of Mathematics	Represents elementary and high school mathematics teachers	
National Science Teachers Association	Represents elementary and high school science teachers	
Parents and Students		
United States Student Association	Represents students	
National Parent Teacher Association	Includes high school and elementary school parents	

CHAPTER 2. EARLY HISTORY OF THE ACG/NATIONAL SMART GRANT LEGISLATION AND IMPLEMENTATION CONCERNS

Of the 23 organizations listed above, nine were contacted to participate in a formal interview. The following organizations were selected based on their level of involvement in first-year implementation activities. Most of them represent professionals who are responsible for disseminating information to students about these grant programs, handling student transcripts, or disbursing financial aid:¹⁴

Directly Affected by Legislation

- American Association of Community Colleges
- National Academic Advising Association
- National Association for College Admission Counseling
- National Association of Student Financial Aid Administrators
- United States Student Association

Indirectly Affected by Legislation

- American School Counselor Association
- National Association of Secondary School Principals
- National Parent Teacher Association

Those directly affected by the legislation were primarily college-level organizations representing admissions, counseling, and financial aid staff members who had specific administrative concerns, such as the definition of "academic year," transcript verification, determination of academic major eligibility, and disbursement of funds. College-level representatives were vocal about their concerns because the policy changes and implementation requirements of these grant programs directly affected the timing and organization of their work.

Those indirectly affected by the legislation include high school representatives, academic advisors, and others who guide students' academic development. High school-level organizations published little or no response to the regulations on their Web sites.

High school and postsecondary administrators expressed significant concern about effectively implementing the ACG and National SMART Grant programs because of the short lead time between the legislation and the start of the school year, the limiting language of the law, inadequate staffing in key areas to address the additional administrative burden of transcript verification, and the need for increased communication and exchange of information among key stakeholders.

¹⁴ The American Association of Collegiate Registrars and Admissions Officers (AACRAO) was invited to participate in an interview for this study but declined.

At the college level, administrators faced the challenge of verifying that students met the eligibility requirements, which in some cases may have required additional staffing or communication between departments with previously little or no communication. Although Title IV—eligible higher education institutions are required to have the administrative capacity to link financial aid to academic requirements, stakeholders reported that much of this process has been automated—at least at larger universities and colleges. To determine student eligibility for the ACGs and National SMART Grants, administrators and staff in several key departments had to provide very specific information and could not simply rely on computer programming to ascertain student eligibility.

Development and Resolution of Salient Concerns

Salient concerns affecting the implementation of the ACG and National SMART legislation, the number of grants, and their distribution are listed in Table 3.

Table 3. Development and resolution of salient concerns

Salient Issues	Source and Resolution: Effective 2006–07 and 2007–08 Academic Years	Ensuring Continued Access to Student Loans Act of 2008 (H.R. 5715): Jan. 1, 2009	Higher Education Opportunity Act (H.R. 4137): Effective July 1, 2009
Eligibility Requirements for A	CGs and National SMART Grants		
Adding "Merit" Aid to Basic Pell Requirements	Legislation; No changes to the Final Regulations dated Oct. 29, 2007.	No change.	No change.
Direct Entry into College in Years One and Two	Legislation; This issue only affects students in the first two implementation years.	No change.	No change.
Full-time Enrollment	Legislation.	Students enrolled at least half- time are now eligible.	No change.
Degree Programs		Students enrolled in 1–2 year certificate programs at degree-granting institutions are now eligible.	No change to "program of study."
U.S. Citizenship		Students who are permanent residents are now eligible.	
Rigorous High School Program	No changes to the Final Regulations dated Oct. 29, 2007.	Only states can define "rigorous secondary school program" of study.	States given increased control over defining rigorous secondary school programs of study.
"Academic Year" Defining Student's Initial and Ongoing Eligibility	Statutory requirements, Interim and Final Regulations. The Department issued clarifications in the Final Regulations.	"Academic year" changed to "year," permitting institutions to use usual grade level progression to measure progress through a program.	

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Table 3. Development and resolution of salient concerns—Continued

Salient Issues	Source and Resolution: Effective 2006–07 and 2007–08 Academic Years	Ensuring Continued Access to Student Loans Act of 2008 (H.R. 5715): Jan. 1, 2009	Higher Education Opportunity Act (H.R. 4137): Effective July 1, 2009
Regulations			
Mandatory Participation	Interim and Final Regulations.	No change.	No change.
	No changes to the Final Regulations dated Oct. 29, 2007.		
Four-year High School Transcript	Interim and Final Regulations. No changes to the Final Regulations dated Oct. 29, 2007.	Statutory requirement, no change.	
Determining Eligibility of Majors/Declaration of Majors	The Department issued clarifications in the Final Regulations and provided institutions with a process to petition for the inclusion of additional majors.	Students enrolled in National SMART-eligible courses at liberal arts institutions that do not offer National SMART majors are now eligible.	No change.
		National SMART eligibility expanded to include students enrolled in the fifth year of a five-year degree program.	No change.
Postsecondary GPA	Legislation; The Department issued clarifications in the Final Regulations dated Oct. 29, 2007.	No change.	No change.

Eligibility Requirements for ACG and National SMART Grant Programs

Need, Merit, and Administrative Burden

College officials, higher education organizations, the press, and even some members of Congress have expressed concern about the shift of federal aid policy from need- to merit-based aid and its effect on low-income students. Although need-based aid programs represent the bulk of aid dollars, spending on merit-based grants by institutions and states has increased more than spending on need-based programs since the 1990s (Heller 2006). Research on state merit-aid programs indicates that higher-income and racial majority students receive a disproportionate share of this aid (Heller 2004; Heller and Rasmussen 2002).

High school and postsecondary stakeholders raised the issue of the ACG and National SMART Grant programs' merit component during the interviews. Even though all recipients of these awards must be eligible for a Pell Grant, some stakeholders were still concerned that the

distribution of aid would shift from the low end to the high end of the Pell eligibility range, with concomitant demographic shifts. For example, in a joint letter to the Department, the Registrars and Admissions Officers and the Academic Advising Association voiced concern about Pelleligible students for whom "the receipt of an ACG or National SMART Grant would be of critical importance. The very students, therefore, that would most benefit from these programs are arbitrarily denied an award."¹⁵

Laurie Wolf, executive dean of students at Des Moines Area Community College, reported that only about 260, or less than 1 percent, of her school's 28,000 students qualified for the ACG. ¹⁶ Other school officials reported similar initial results, noting that many of their students attended school part-time, were not U.S. citizens, or were not taking the eligible majors.

Because the ACG and National SMART Grant programs represented a shift away from the purely need-based aid standards used in other Title IV programs, implementation problems arose. Verifying student achievement in a prescribed way, at both the high school and postsecondary levels, required greater coordination among admissions officers, financial aid officers, and registrars, and in some instances imposed additional administrative burdens because existing systems were ill-equipped to meet the new demands for documentation.

Traditionally, financial aid offices have not needed to evaluate transcripts in detail, so the ACG and the National SMART Grant programs required a new level of involvement and coordination between the registrar, the admissions office, and the aid officers. In response to the Notice of Proposed Rulemaking, the director of financial aid at Hope College wrote "[the Admissions Office staff] members have to leave their offices, walk across campus to the Office of the Registrar, and manually review high school transcripts on a weekly basis to ensure student eligibility for the ACG."

The counter argument is that these programs were designed to encourage academic and enrollment behaviors that contribute to successful and timely degree completion (Adelman 2006). These statutory requirements (direct entry into college from high school, full-time enrollment, and enrollment in degree programs) are aligned with previous research that identifies characteristics associated with degree attainment. Findings from Adelman's 1999 report, *Answers in the Toolbox: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*, and its 2006 follow-up, *The Toolbox Revisited: Paths to Degree Completion From*

¹⁵ Jerome H. Sullivan, executive director of AACRAO, and Joyce E. Smith, executive director of NACADA, to Fred Sellers, U.S. Department of Education, Aug. 17, 2006.

¹⁶ *Inside Higher Ed*, "Are Students Getting National SMART?", Dec. 14, 2006. Available at: http://insidehighered.com/layout/set/print/news/2006/12/14/National SMART.

¹⁷ Phyllis Hooyman, director of financial aid at Hope College to Sophia McArdle, U.S. Department of Education via the Federal eRulemaking portal, Sept. 5, 2007, in response to the Notice of Proposed Rulemaking. Available at: http://www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&o=090000648027e67d.

High School Through College, indicate that high school preparation and academic performance, continuous enrollment, and the number of credits attempted during a student's first year in college, all contribute to timely degree completion.

Getting higher grades, enrolling full-time in a degree program, and having completed a rigorous high school curriculum are all correlated with greater success in and after completing college. According to Heller (1997), because lower-income students are sensitive to small changes in college tuition, the promise of additional federal funds may prove to be key in improving students' high school attainment and future college enrollment.

Requirements Common to ACGs and National SMART Grants

Federal Pell Grant Recipients

The requirement that students be Federal Pell Grant recipients in order to receive ACGs or National SMART Grants makes sense on its face in terms of income limits and other factors. However, it excluded *some* students *enrolled in year-round institutions, or during summer terms*, who had exhausted their eligibility for Pell awards.

Full-time Student Status

The regulations also limited the award to full-time students by using a very specific definition of "full-time": 12 credit hours per semester, quarter, or term, or 24 clock hours per week. Although starting college part-time is also a predictor of dropping out (Tinto 1998), stakeholders were concerned that this restriction would reduce access to college among low-income students, because they are more likely to attend college part-time than are higher-income students (Chen 2007; Berkner, He, and Cataldi 2002; O'Toole, Stratton, and Wetzel 2003). Low-income students jeopardize their probability of success in college by working too many hours while attending and may also have family obligations that result in part-time enrollment (Choy 2000; Goldrick-Rab 2006). Some stakeholders felt that providing ACGs and National SMART Grants to part-time students could reduce the need for these students to work too much while attending college and, thus, increase their likelihood of staying in school and completing their degrees. Although the statute did not initially allow for part-time students, H.R. 5715 has expanded eligibility to include all Pell-eligible students enrolled at least half time.

Degree Program

The original statutory language excludes ACG-eligible Pell Grant recipients who are enrolled in certificate programs but plan to enter baccalaureate programs; many respondents wanted to see this language changed to include certificate-seeking students. The exclusion of students enrolled in certificate programs is of particular concern to both community colleges and for-profit institutions because they enroll and graduate the bulk of these students.

The American Association of Community Colleges thought the Department would expand eligibility to include certificate-seeking students after the negotiated-rulemaking sessions and was disappointed that the Department did not believe it had the authority to include these students. The association was committed to gaining eligibility for students enrolled in certificate programs and "found [the Department's] rationale unconvincing in all respects," which is why their representative at the negotiated-rulemaking sessions withheld her consent. They were "extremely upset" over this issue, which was one of two concerns that prevented negotiators from reaching a unanimous decision during the negotiated-rulemaking sessions that took place in spring 2007.

In a letter commenting on the Interim Final regulations, George Boggs, president of the American Association of Community Colleges, noted that community colleges "confer more than 250,000 certificates each year in fields such as biotechnology, aerospace manufacturing technology, electronics engineering, and renewable energies." ¹⁸

Ensuring Continued Access to Student Loans Act of 2008 (H.R. 5715) passed by Congress in April 2008 and signed into law by President Bush on May 7, 2008, authorizes ACG eligibility for students attending a postsecondary certificate program that is no less than one year in length, or no less than two years in length, at a two- or four year degree-granting institution. The Higher Education Opportunity Act of 2008 (H.R. 4137), enacted Aug. 14, 2008, delays the enactment of this provision from January 1, 2009 to July 1, 2009.

U.S. Citizenship

During the first implementation year, the ACG and National SMART Grant programs were only available to U.S. citizens who were eligible to receive a Federal Pell Grant. Although the Pell Grant program does not exclude students who are noncitizen permanent residents, the ACG and National SMART Grant programs are limited to students who are U.S. citizens. Stakeholders expressed frustration that this restriction was written into the original legislation as it further limited the reach of the grants, added to the problem of determining student eligibility, and excluded those Pell-eligible students who were noncitizen permanent residents (even if they otherwise met the requirements). The *Ensuring Continued Access to Student Loans Act of 2008* has since fixed this by expanding eligibility to noncitizen permanent residents.

Additional ACG and National SMART Grant Requirements

As initially enacted, the ACG program required completion of a rigorous high school program of study after Jan. 1, 2006, for first-year students, and after Jan. 1, 2005, for second-year students. Students who graduated from high school before Jan. 1, 2005, were ineligible for an award.

¹⁸ *Inside Higher Ed*, "Education Department Accused of Misreading Law," Aug. 1, 2006. Available at: http://insidehighered.com/news/2006/08/01/grants.

Students needed to be in the first or second academic year in a two- or four-year degree-granting institution. If applying for enrollment in the first year, students could have no prior enrollment in college. If applying for enrollment in the second year, students needed a grade point average (GPA) of 3.0 for the first academic year. Neither the *Ensuring Continued Access to Student Loans Act of 2008* nor *the Higher Education Opportunity Act of 2008* changed this.

As initially enacted, the National SMART Grant program required that students be in the third or fourth academic year of study at a four-year degree-granting institution and that they have an eligible major in the physical, life, or computer sciences, engineering, mathematics, technology, or a critical foreign language. Students needed to have at least a 3.0 GPA.

Rigorous Program of Study

Although the statute requires a "rigorous program of study," it did not define what this might be. So, in a very short period of time, these requirements needed to be defined, so that schools and students could be notified. The secretary designated four ways for students to qualify. Of these, three required checking the students' transcripts, and the fourth required knowing students' scores on Advanced Placement (AP) and International Baccalaureate (IB) exams. The initial avenues for eligibility for the ACG programs are described in detail in Chapter 3.

Respondents voiced concern about the potential administrative burden of verifying rigorous program completion, and the way in which a "rigorous" curriculum was initially defined in the statute. Community colleges found it particularly burdensome to verify high school courses taken by their students because many did not require a high school transcript for enrollment.

All colleges and universities shared the burden of evaluating and processing a high volume of transcripts. Private institutions and large public research universities often enroll a large number of out-of-state students, so requiring staff to verify courses according to the state in which the curriculum was completed requires additional work. The National Association of State Student Grant and Aid Programs identified this administrative burden as one of the main barriers to proper implementation of the ACG program. Institutions must be versed in each state's definition of a "rigorous secondary school curriculum," which makes the process more time-consuming and complex. In addition, the course names listed on a student's transcript may not match what the state defines as its "rigorous curriculum," which would require the institution to contact the high school and verify the course description.

Some respondents questioned whether all students had access to rigorous programs of study. Currently, there is no federal source of information on course offerings that can be used to answer that question. Several studies have been published in the last two years that provide anecdotal data on the availability of rigorous curricula. A 2007 study by the University of California, Los Angeles, and the University of California All Campus Consortium on Research

for Diversity confirms that in California, many schools (especially those serving minorities) do not offer enough courses of the "a-g" course sequence needed to enter the University of California or the California State Universities. ¹⁹ The a-g course sequence is an approved rigorous program of study that allows UC and CSU systems to offer assurance that Pell-eligible students met the course work requirement outlined in the statute. In February 2008, The College Board released its fourth annual *AP Report to the Nation* that talks about one potential way to measure access to rigorous curricula (and one of the approved Department ACG options)—the percentage of students taking an Advanced Placement (AP) exam. ²⁰ The data show that the percentage of students who took an AP exam, and the percentage that received a "3" or higher on an AP exam, increased between 2002 and 2007, which may indicate an increase in access.

These results are consistent with a 2007 report released by the California Council on Science and Technology and the Center for the Future of Teaching and Learning, which suggests there is a shortage of teachers with appropriate qualifications to teach mathematics and science courses. At the national level, a 2007 interim report on teacher quality under *No Child Left Behind (NCLB)* found that high poverty and high minority schools had a higher percentage of teachers who were not "highly qualified" (as defined by *NCLB*). Teachers in these schools also had less teaching experience and were less likely to have a degree in the subject that they taught.

Academic Year

The term "academic year," specifically defined in Section 481(a) of the *Higher Education Reconciliation Act of 2005*, was used to determine the specific academic year in which a student was enrolled or had completed, thus determining the student's initial and continuing eligibility for ACGs and National SMART Grants. The definition was also used to ensure that students did not receive more terms of funding than permitted under the statute. Institutions were required to develop a Title IV academic year definition for each academic program that meets or exceeds the minimum requirements of that statutory definition.

Initial confusion over the rules for the program led to errors in awarding aid. For example, *Inside Higher Ed* reported that 450 students were offered National SMART Grants at Utah State

¹⁹ California Educational Opportunity Report 2007. UCLA Institute for Democracy, Education, and Access University of California All Campus Consortium on Research for Diversity. Available at: www.idea.gseis.ucla.edu/publications/eor07/state/pdf/StateEOR2007.pdfk.

²⁰ The 4th Annual AP Report to the Nation. 2007. The College Board. Available at: http://www.collegeboard.com/press/releases/194817.html.

²¹ Critical Path Analysis of California's Science and Mathematics Teacher Preparation System. 2007. California Council on Science and Technology and The Center for the Future of Teaching and Learning. Available at: http://www.ccst.us/publications/2007/2007TCPA.php.

²² State and Local Implementation of the No Child Left Behind Act, Volume II: Teacher Quality Under NCLB: Interim Report. 2007. U.S. Department of Education. Available at: http://www.ed.gov/rschstat/eval/teaching/nclb/execsum.html.

University in August 2006; one week later, 150 of these students were informed that in fact they were *not* eligible for the \$4,000 grants.²³ These students had taken too many academic credits to qualify under the definition of an academic year, which tied a student's year in college precisely to the number of academic credits he or she had accumulated.

Under the Interim Final Regulations, academic year progress was defined both in terms of the minimum number of weeks of instructional time and in credit or clock hours. In a "Dear Colleague" letter (GEN-06-18), the Department acknowledged that it would be difficult for many institutions using a traditional term-based academic calendar to determine the actual number of weeks of instruction that a student would need to complete the number of credit hours in an academic year and allowed institutions to decide this on a student-by-student basis, using either of the following approaches:

- Assume that there were 30 weeks of instructional time for each increment of credit hours that makes up the institution's Title IV academic year definition (e.g., 24 credit hours equals 30 weeks of instruction, or 30 credit hours equals 30 weeks of instruction)—with the proviso that an institution must also determine the actual number of weeks of instruction for a student who requests that such a determination be made or who questions whether he or she has completed an academic year; or
- Determine the actual number of weeks of instruction that were included for the student to complete the number of credit hours in the institution's Title IV academic year definition by reviewing the student's academic record to see how many weeks it took the student to complete the credit hours earned—with the proviso that an institution may not assign any weeks of instruction to credits earned by the student from AP course work, IB course work, by testing out of a program or course, or from life experience, because those credits were not earned during attendance at a postsecondary educational institution, even though they apply toward completion of the student's program, and thus are included in the credit hour component of a Title IV academic year.

The Department offered the following illustrative example:

A student begins enrollment at an institution that defines its academic year as 24 semester credits. The institution applies 24 credits that the student earned through AP toward completion of the student's eligible program. The institution chooses to review the student's academic record to determine the actual number of weeks of instruction (or the student requests that the institution do so). Since all the credits earned were from AP and there are no weeks of

²³ *Inside Higher Ed*, "Grants Given, and Taken Away," Aug. 25, 2006. Available at: http://www.insidehighered.com/news/2006/08/25/smart.

postsecondary instruction associated with AP credits, the student is still in her first academic year and is eligible for a first-year ACG award.

Both administrators and leading college advocacy groups expressed concern about this part of the law. These stakeholders called the statutory definition of "academic year" unworkable and considered it to be the largest impediment to smooth operation of the programs. The definition of academic year progression outlined in the law also prevented negotiators from reaching a consensus about the regulations during the negotiated-rulemaking sessions.

Stakeholders preferred that academic year be determined only by the student's grade level or credits earned and his or her standing as defined by the institution, which is consistent with the definition of "year" used in other Title IV programs.

The compliance and systems implementation manager at the University of South Carolina, Columbia campus, stated in his response to the Aug. 7, 2007, NPRM, "...[A]n inordinate amount of time and energy has been expended in trying to understand and work out the specifics ..." of the academic year definition. ²⁴ He argued that flexibility was needed, as it was not possible to reliably project a student's eligibility. Eligibility could change from the initial point of determination due to a wide range of factors, including the timing of receipt of high school transcripts and AP or IB scores from the College Board; changes to the student's major; late posting of transfer credits; grade changes (deferred, late, incomplete); and add or drop decisions and retroactive entrance or withdrawal. Such changes could affect the number of credit hours a student had accumulated, as well as the student's GPA.

His concerns were echoed by the senior vice president of advocacy and general counsel for the Career College Association: "Having to monitor and track grade level progression for the ACG and National SMART Grant programs in a manner that is different from all other *HEA* Title IV programs is confusing and burdensome to institutions, and can lead to unintentional errors by the institutions."²⁵

The Department of Education responded that the definition of "academic year" as described in Section 481(a)(2) of the *Higher Education Reconciliation Act of 2005* includes the ACG and

²⁴ Jean Gasparato, compliance and systems implementation manager at the University of South Carolina, Columbia campus to Gail McLarnon, U.S. Department of Education via the Federal eRulemaking portal, Sept. 5, 2007, in response to the Notice of Proposed Rulemaking. Available at:

http://www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&o=090000648027e1d0.
²⁵ Reba A. Raffaelli, senior vice president of Advocacy and General Counsel at the Career College Association to Sophia McArdle, U.S. Department of Education via the Federal eRulemaking Portal, Sept. 4, 2007, in response to the Notice of Proposed Rulemaking. Available at:

http://www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&o=090000648027dc8d.

National SMART Grant programs, leaving little latitude for modifying the statutory requirements.

Many stakeholders wanted the Department to keep the transitional guidelines established for the 2006–07 and 2007–08 academic years, because these guidelines provided greater flexibility and eased some of the administrative burden.

Changes Enacted by the Ensuring Continued Access to Student Loans Act of 2008 (H.R. 5715)

Congress revisited many of these contentious issues in H.R. 5715 and revised the eligibility requirements for the ACGs and National SMART Grants. The grants can now be awarded to students enrolled less than full-time, to those in certificate programs, or to permanent residents. The legislation also deleted the "academic year," allowing schools more flexibility in determining student standing. It also allowed students enrolled in demanding degree programs requiring more than four years of course credits to receive a fifth-year grant. In addition, Congress made clear that the states were to identify the programs of study to be considered as rigorous and to be used to determine student eligibility for ACG Grants. These revisions were slated to come into effect as of Jan. 1, 2009.

Changes Enacted by the Higher Education Opportunity Act (H.R. 4137)

On Aug. 14, 2008, Congress passed H.R. 4137, which reauthorized the *Higher Education Act of 1965 (HEA)*. The *Higher Education Opportunity Act of 2008 (HEOA)* extended the effective date to July 1, 2009, and strengthened state control over the defining rigorous secondary school programs of study.

Regulatory Concerns

As noted, the legislation was enacted quickly, and the initial interim regulations were as well. Stakeholders were generally frustrated with the administrative burden they felt the programs put on institutions and staff. In addition to general concerns about the difficulty of discerning which students were eligible based on the statutory limitations, stakeholders' key concerns included (1) the mandated participation of postsecondary institutions; (2) using the four-year high school transcript versus only three years; (3) determining eligible majors for the National SMART Grant; and (4) calculating postsecondary GPAs for students.

Mandatory Participation

In a letter to the Department, the student financial aid administrators expressed "serious concerns about requiring an institution to participate in the ACG and National SMART Grant programs if it wishes to continue its participation in the Federal Pell Grant Program . . . this requirement is an

infringement of institutional autonomy."²⁶ Stakeholders also cited the short amount of time institutions were given to implement these programs as a reason to provide institutions with an option to participate. Some institutions were hesitant about making awards that might be called into question later because they were unsure about the appropriate procedures. And if the process of making the initial awards initially was difficult, any verification efforts and eventual audits were also difficult. In many cases, schools had to make financial aid awards—particularly for incoming students—and then verify later whether the students were in fact eligible.

In its response to the negotiated-rulemaking sessions, the Department said it was not going to change the Interim Regulations in order to ensure that students with financial need could receive all the federal grants to which they were entitled. If the program was voluntary and some schools chose not to participate, it could have created a "separate but unequal" situation where otherwise eligible students would be missing out on the chance to receive additional grant funds based on the school they decided to attend. This situation may also have had a significant effect on students' choice of schools.

Four-year Transcript

Postsecondary institutions were required to base ACG awards on students' four-year high school transcripts instead of three or three and a half years of high school work, which is what most institutions receive from their applicants during admissions. In a joint letter to the Department, the American Council on Education (ACE) and seven other stakeholder organizations called this requirement a "breathtaking new administrative burden," and the American Association of Community Colleges (AACC)—in a separate letter—said this would be especially difficult for community colleges, because "many if not most of them do not collect high school transcripts" and because they "tend to provide an 'open door' admissions policy, and instead use front-end testing instruments to determine student readiness for particular programs." According to the president of Glendale Community College, "This has added additional manual evaluation time to our processes. Also, because of the many variables, we have not found a way to automate this program other than to select those who have received this grant in the prior year. All eligibility review and tracking is a manual process." This sentiment was echoed by the director of financial aid at Plymouth State University, "The processing requirements needed to identify

²⁶ Dallas Martin, president of NASFAA, to Fred Sellers, U.S. Department of Education, Aug. 10, 2006.

²⁷ David Ward, president of ACE, to Fred Sellers, U.S. Department of Education, Aug. 16, 2006.

²⁸ George R. Boggs, president and CEO of AACC, to Fred Sellers, U.S. Department of Education, Aug. 17, 2006.

²⁹ Ellen Neel, president of Glendale Community College to the U.S. Department of Education via the Federal eRulemaking Portal, Sept. 6, 2007, in response to the Notice of Proposed Rulemaking. Available at: http://www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&o=090000648027e8b4.

eligible ACG students is excessive. . . . The ACG program requires extreme manual processing."³⁰

The Department has no plans to modify this part of the regulation, as the statutory language specifies that a student must have graduated from high school having completed a rigorous program of study in order to qualify for the ACG award. The November 2006 Final Regulations stated that a four-year high school transcript must be reviewed in order to ascertain whether the student has met the curricular eligibility requirements.³¹

Eligibility for National SMART Grants Based on Academic Major and Course Work

The initial list of eligible academic majors for the National SMART Grant was published in a "Dear Colleague" letter (GEN-06-06) published May 2, 2006, and was initially intended to apply to both the 2006–07 and the 2007–08 school years.

Stakeholders expressed several concerns about the list of eligible majors, questioning perceived omissions and noting the need for a mechanism to add additional majors to the approved list. Stakeholders objected to the omission of certain majors, such as food science. Stakeholders also questioned whether students attending institutions that lacked particular eligible "majors" could receive National SMART Grants if they were taking the relevant coursework.

In another "Dear Colleague" letter (GEN-07-06), extending the list of majors for the 2007–08 school year, the Department stated, "We apologize for the timing of this notification, as we know that the academic year is beginning and you may have already completed many of your financial aid packages. However, institutions must provide National SMART Grants to all potentially eligible students, including those in the additional majors, for the 2007–08 award year." The additional eligible majors included food science, food technology and processing, and other fields. (See Appendix B.)

Initially, under Section 691.15(c)(2)(ii) of the program regulations, a student was eligible to receive a National SMART Grant if the student enrolled in the courses necessary both to complete the degree program and to fulfill the requirements of the intended eligible major. Departmental guidance on implementing this provision initially stated that eligibility for a National SMART Grant for a payment period was based on the student being enrolled during that period in coursework that may include the courses in the National SMART Grant-eligible major *or* other courses that make up the student's National SMART Grant-eligible program, or both (see the 2007–08 Federal Student Aid Handbook, pp. 3–70).

³⁰ June Schlabach, director of the Financial Aid Team at Plymouth State University to the U.S. Department of Education via the Federal eRulemaking Portal, Sept. 4, 2007, in response to the Notice of Proposed Rulemaking. Available at:

http://www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&o=090000648027be3c.

³¹ Final regulations (FR Doc E6-18197), Nov. 1, 2006. Federal Register, Vol. 71, No. 211.

In October 2007, the Department subsequently revised its guidance in a "Dear Colleague" letter (GEN-07-07) by stating that an otherwise eligible student could receive a National SMART Grant for a payment period *only* if the student were enrolled in at least one course that meets the specific requirements of the student's National SMART Grant-eligible major. If the student were enrolled only in courses that satisfied the general education requirements of the National SMART Grant-eligible program, but not in any courses that were specific to the major, he or she would *not* be eligible for a National SMART Grant payment for the semester.

The final regulations for the National SMART Grant Program, published on Oct. 29, 2007 (72 FR 61248), provided a mechanism for institutions of higher education to request that additional majors be designated as eligible, so that otherwise eligible students in those majors could receive National SMART Grants. The "Dear Colleague" letter GEN-08-02, published on Feb. 6, 2008, detailed the process to be used to propose additional eligible academic majors and invited institutions of higher education to submit requests for additional majors to be designated as eligible for the National SMART Grant Program for the 2008–09 award year. In response to DCL GEN-08-02, institutions submitted 33 requests for additional eligible majors, proposing that 26 new majors be included. Of these, two were already on the revised list (computer and information sciences and nutrition science). The remaining 24 proposed new majors were rejected as inconsistent with the statutory requirement that majors must be in the physical, life, or computer sciences, mathematics, technology, or engineering, or a critical foreign language in order to be eligible for a National SMART Grant. The list of eligible academic majors as published in DCL GEN-07-06 will not be changed in the 2008–09 award year.

Postsecondary Grade Point Average

How postsecondary grade point averages (GPAs) were to be computed became another complex issue. To receive a second-year ACG, a student had to have a cumulative GPA of at least 3.0 from the first academic year. Students receiving a National SMART Grant needed a cumulative 3.0 GPA for their eligible program of study (not just the courses in the major).

Stakeholders representing college financial aid administrators and registrars were concerned with how postsecondary GPAs should be calculated, particularly for transfer students and students entering an institution with AP or IB diplomas. They questioned the need to calculate GPA by academic term for National SMART Grant eligibility and also expressed confusion about whether the statute is referencing cumulative GPA in all courses taken during the term or just those in a student's major for the National SMART Grant. (As indicated above, it is *not* just courses in the major.)

The final regulations released in October 2007 clarified some additional concerns about institutions that use numeric scales other than 4.0, and how to calculate the GPA for transfer students—including grades awarded in courses accepted for credit by the receiving school. The

Department added language to the final regulations that instructed institutions that use other numeric scales to ensure that "its minimum GPA requirement meets the same numeric standard as a cumulative GPA of 3.0 or higher on a 4.0 scale."

Ongoing Concerns

High School Counseling—Course-taking, Rigorous Program of Study, and Applications to Colleges and for Financial Aid

The ACG and National SMART Grant programs added another component to an already complex array of state, institutional, private, and federal aid programs. Previous research found a general lack of understanding of student aid by potential recipients (Berkner and Chavez 1997; Choy 2001; Horn and Nuñez 2000). Despite the Department's concern, as expressed in the Academic Competitiveness Council's report (May 2007), that student access to postsecondary schooling is "limited because of inadequate information and a confusing financial aid system," the ACG and National SMART Grant programs are as complex, if not more so, than other federal aid programs due to the level of coordination needed between and within high schools and postsecondary institutions—issues particularly mentioned by stakeholders. The ACG and National SMART Grant programs use multiple criteria for defining a "rigorous program of study"—including State Scholar's initiative for 24 states, other recognized state programs, use of complete four-year high school transcripts, tracking "academic year" for students' initial and continued eligibility, and the need to recalculate GPA each term for National SMART Grant recipients.

Initially, during the first implementation year, the Department notified students who completed a Free Application for Federal Student Aid (FAFSA) form and were eligible for a Pell Grant that they might also be eligible for an ACG or National SMART Grant award. Students were asked to confirm their eligibility status online. Colleges were forwarded a list of self-identified eligible students and were asked to verify that these students were indeed eligible (e.g., met the rigorous curriculum requirement for an ACG, met GPA and major field requirements for a National SMART Grant). Administrators and counselors had little chance to notify students and families about these programs. Financial aid officials who had already started—or in some cases finished—their financial aid packaging for the 2006–07 academic year had to incorporate the new awards into their financial aid budget. For the 2008–09 academic year, students will be able to indicate potential eligibility on their FAFSA form, which should simplify the student self-identification process, although institutions will still be required to verify eligibility.

Several stakeholders who were interviewed suggested that states find a way to link ACG eligibility to college admissions requirements and define requirements corresponding to the state college and university admissions requirements. A small number of states already do this. The University of California system, for example, has a set curriculum that is required for admission

and also meets ACG requirements, while the state of Florida has identified its Bright Futures Scholars program as a recognized ACG course of study and notified institutions about which students are eligible. At the institutional level, Brigham Young University contacted all students who self-identified on their FAFSA as ACG-eligible and also contacted all other students who appeared eligible but did not self-identify.

State Graduation Requirements and Postsecondary Requirements

All the stakeholders interviewed felt that offering a rigorous high school curriculum to students would result in better academic preparation and future college success. They expressed concern, however, that not all states have college-prep curricula available at all high schools, especially in low-income areas, which means many Pell-eligible high school students might be excluded. Some states do not mandate all high school districts to offer the courses required to meet the rigorous curriculum course work requirements. Schools in states without a defined curriculum may not have the necessary courses available.

The Department has noted that, since the ACG and National SMART Grant programs were enacted, at least 14 states have chosen to add graduation requirements that would increase the number of program-eligible students who graduate from public high schools. However, these changes are most likely not attributable to the ACG program, because changes in state curricula are typically years in the making.

High School Advising—College Preparatory Courses, Financial Aid, and College Applications

High school guidance and college admissions offices are often understaffed and overcommitted. Unless students start taking a required sequence of classes early in their high school career, they will be ineligible for the ACG because they have inadequate time to complete their prerequisites if they have not done so by the time they are juniors or seniors.

High school counselors also may play a crucial role in disseminating information about these grants to eligible students. Research has repeatedly demonstrated that improving counseling by increasing the number of counselors, providing professional development, and improving both the quantity and quality of time spent with each student are all significantly related to college access, especially for low-income students (McDonough 2005). The American School Counselor Association reported that only half of the states currently mandate school counselors. Having an inadequate counseling staff weakens the connection necessary to inform high school students and their families about the ACG program.

Institutions, postsecondary administrators, and high school counselors all voiced concern about communication and exchange of information between those professionals responsible for student

aid and the members of the counseling and advising community, who for the most part have only general knowledge of student aid programs and no knowledge of whether an individual student is, or will be, eligible for a Pell Grant. High school counselors know about the rigorous curriculum requirements of the ACG, but they can only identify potential Pell-eligible students through their participation in the National School Lunch Program or financial planning workshops. Even though most counselors have access to copies of the FAFSA forms, they may not have detailed knowledge about how students and their families apply for financial aid. School counselors do not necessarily have any structured preparation in college counseling, so they may be working with limited information. Most degree programs for counselors do not include information about financial aid.

An Academic Advising Association member identified that communicating the ACG requirements to academic advisors and high schools is a key challenge. Another challenge, according to this member, was involving high school counselors in reviewing the program eligibility requirements before students enroll at a postsecondary institution. A comprehensive college awareness campaign cited online by the Department is the Indiana Commission on Higher Education's *Learn More Indiana* initiative, which includes a Web site and magazine that targets students beginning in the eighth grade.

California passed legislation in July 2006 authorizing \$200 million to be spent on hiring more counselors at the elementary and high school levels in order to improve postsecondary enrollment. In March 2007, the American School Counselors Association and the National Association for College Admission Counseling together petitioned Congress for increased funds for existing counseling programs. These efforts, along with providing the counseling community with current information on the academic requirements for the ACG and National SMART Grant programs, will be very important to their success.

Conclusion

The complex requirements and rapid implementation of the ACG and National SMART Grant programs in the very compressed first year were difficult for all parties. The ACG and National SMART Grant programs were signed into law in February 2006, with funding to be awarded for the 2006–07 academic year. Within this short time period, the Department of Education notified the public of this new source of potential financial aid; provided guidance and interim regulations to inform schools about to how to award the 2006–07 funding and assess students' ongoing eligibility; set up processes to disburse funds to schools; worked with stakeholders to develop final regulations for 2006–07; and began the process of establishing regulations for subsequent years. The Department of Education engaged in extensive outreach efforts, primarily to the postsecondary institutions and associations most directly concerned with these programs, but also, through the Department Web site, directly to students and families. Amidst all the

changes, funding allocated by Congress for the 2006–07 school year was awarded. Chapter 4 describes how that aid was distributed by schools and to students. Chapter 5 offers a baseline comparison, showing what might have been expected in awards, given the initial eligibility requirements for ACGs and National SMART Grants.

As noted, stakeholders interviewed for this report expressed concerns about the ACG and National SMART Grant requirements and their experiences enacting these programs during the first implementation year. Many identified compliance with the eligibility requirements as specified initially by Congress and as defined in regulations issued by the Department as being most problematic. Stakeholders recounted the administrative burdens they encountered in attempting to admit students, devise financial packages, and determine (and redetermine) eligibility and award funds. Congress subsequently revised the eligibility requirements as part of the changes in H.R. 5715, and again in the passage of H.R. 4137.

CHAPTER 3

Rigorous High School Programs

A key requirement of the Academic Competitiveness Grant (ACG) program is that students complete a rigorous high school program as defined by the secretary of education. The secretary provided three options (described below) for the first two years of the program (2006–07 and 2007–08) and accepted all existing state-established advanced and honors diploma programs as "rigorous." In addition, the secretary gave states until June 1, 2006, to request recognition of other programs. For the first year of the ACG program, the secretary approved at least one advanced, honors, or other program in 40 states, and more than one program in 22 states.³²

In addition to recognizing students who have completed rigorous high school programs, states are increasing high school graduation requirements. As of summer 2006, 26 states and the District of Columbia had scheduled changes to take effect over the next few years, all of which will make it more difficult to graduate from high school. Some changes involve increasing the number of courses to be completed in certain subjects or overall, and others address course level or content.

Of particular interest is whether there is variation by state in the percentage of Pell Grant recipients who receive ACGs and, if so, what might explain the variation. One possibility is variation in the rigor of the approved rigorous high school programs. If rigor varies, participation rates might be higher in states in which it is easier to qualify. Another possibility is variation in states' high school graduation requirements. Pell Grant recipients in states with more demanding standards might receive ACGs at higher rates, for example. The rest of this chapter presents a comparison of the approved state programs and state high school graduation requirements across states to provide a context for comparing participation rates across states and, later, over time.

U.S. Department of Education Definitions of a Rigorous High School Program

1. Participating in the State Scholars Initiative (SSI) (offered in selected districts in 22 states in 2006). The SSI is a national initiative funded by the U.S. Department of Education's Office of Vocational and Adult Education (OVAE) and administered by the Western Interstate Commission for Higher Education (WICHE). It is designed to motivate high school students to complete a rigorous course of study that prepares them for success in postsecondary education or training and in their future careers.³³ To achieve recognition, students in participating states must

³² A description of the requirements in each state is available at: http://www.ed.gov/admins/finaid/about/ac-smart/state-programs.html.

³³ More information on this initiative and a current list of participating states is available at: http://www.wiche.edu/statescholars/.

complete all state-mandated high school graduation requirements and also the following course work: four years of English; three years of mathematics (including algebra I, algebra II, and geometry); three years of laboratory science (biology, chemistry, and physics); three and a half years of social studies (chosen from U.S. and world history, world geography, economics, and government); and two years of a language other than English.

- **2.** Completing a curriculum similar to the State Scholars Initiative (SSI). This option, referred to hereafter in this report as the *ED course-based curriculum*, is available to high school students in all states and within each state to students attending high schools that offer the courses. The requirements are slightly less demanding than those of the SSI, with more flexibility in meeting the mathematics, science, and social science requirements and a reduced language requirement. To qualify under this option, students must earn passing grades in the following: four years of English; three years of mathematics (including algebra I and a higher level course such as algebra II, geometry, or data analysis and statistics); three years of science (including at least two courses chosen from biology, chemistry, or physics); three years of social studies; and one year of a language other than English.
- **3.** Completing at least two Advanced Placement (AP) or International Baccalaureate (IB) courses. Students are required to pass these two courses with a score of 3.0 or higher (out of 5.0) on the AP exams or 4.0 or higher (out of 7.0) on the IB exams. This option is available to students in all states, but not necessarily in all schools. In 2002–03, 67 percent of public high schools offered AP courses, and 2 percent offered IB courses (Waits, Setzer, Lewis, and Greene 2005). However, students can take AP courses through independent study (or online in some states). ³⁴
- **4. Completing an existing advanced, honors, or other approved program.** In most cases, the approved programs were unique to a state, but seven states were approved to use the *High Schools That Work (HSTW)* Award of Educational Achievement. Some of the state programs were based solely on completing specific courses, while others had additional or different requirements.

In every state, students potentially had at least two ways to meet the rigorous high school curriculum: the ED course-based curriculum and passing AP or IB courses with sufficiently high scores (assuming their schools offered all the required courses and that they had access to AP or IB courses). Students in states participating in the SSI had a third option, and those in states with approved state programs had at least one more option and sometimes several. Figure 2 shows how many states provided their students with various numbers of options.

³⁴ Available at: http://www.collegeboard.com.

³⁵ The requirements for this award are described in Appendix C.

³⁶ These included, for example, passing a state or local assessment test, achieving a minimum GPA or score on a PSAT, SAT, or ACT test, completing AP or IB courses or exams or dual-enrollment courses, or completing a senior project.

Number of states 25 20 16 15 15 10 10 6 5 Two Three Four Five More than five

Number of ways to meet rigorous curriculum requirement

Figure 2. Number of states with one to five or more ways to meet the rigorous curriculum requirement for the ACG: 2006–07

NOTE: Includes 50 states and the District of Columbia.

SOURCE: Derived from state information at U.S. Department of Education Web site:

http://www.ed.gov/admins/finaid/about/ac-smart/state-programs.html.

Approved State Programs

Table 4 lists all the approved state programs and, for those that were course-based, compares the requirements with those of the ED course-based curriculum.³⁷ It also presents a comparison of the mathematics and science course content requirements. Types of other requirements, if any, are also indicated. In the 35 states with course-based approved programs, every approved program required four years of English. In all but two states, the approved programs required at least three years of mathematics, including algebra I and a higher-level course. Most approved

³⁷ The ED course-based curriculum is used as the standard for comparison rather than the SSI curriculum because it is less demanding and is available to students in all states. The table indicates which states are using the HSTW Award of Educational Achievement to qualify students, but the HSTW-recommended curriculum is not compared with the ED course-based curriculum. The way the requirements are structured—with alternative ways of qualifying and no required courses—makes it difficult to compare the program required for this award with other curriculum-based programs.

Table 4. Detail on rigorous high school programs approved by the U.S. Department of Education, by state: 2006-07

		S	mparie	with ,	the ED C	ed-back	Comparison with the ED course based curriculum*	*						
		3	III pai isc	III WILL	וופ בח כי	70136-Das	בי כתווכתו							
			,				Math	Science			į			
		•	٥	Curriculum	띨		courses	courses		•	Other rec	Other requirements	S	
							At least	Three years			AD/IR			
						Lan-	years	least			courses			
						guage	including	two			ō	Specific		
						other	algebra I	from	State		exams	scores		Other
		Eng-	;			than	and a	biology,	exams		or dual	on		non-
		lish (four	Math (three	ence (three	studies (three	English (one	higher- level	chem- istrv. or	or local assess-		enroll- ment	PSAT/ SAT or	Senior	course reguire-
States	Program name	years)		years)	years)	year)	course	physics	ments	GPA	courses	ACT	project	ment
Alabama	Advanced Academic Endorsement	~	٨	٨	٨	٨	>	~	^					
	High Schools That Work Award of Educational								1.					
	Achievement								>					
Alaska	None													
Arizona	Dual Credit Coursework Program									7	>			
Arkansas	Academic Challenge Core Curriculum	~	٨	>	>	٨	>	^		>		~		
	Coursework Option	~	>	>	>	ı	>	~						
California	California Golden State Seal Merit Diploma								~					
	A–G Requirements	٨	V	٧	٧	٨	<u> </u>	٧						
Colorado	Higher Education Admissions Requirements	Λ	\wedge	$^{\wedge}$	^	1	\wedge	Λ						
Connecticut	Dual Enrollment Program									V	٨			
	Technical High School System Program	٨	7	٨	^	1	V	V						٨
Delaware	Distinguished Achievement Diploma								\wedge			\wedge		
	Delaware Coursework Requirements	\wedge	γ	^	^	\wedge	^	Λ						
	High Schools That Work Award of Educational								1					
	Achievement								>					
D.C.	None													
Florida	Bright Futures Program	\wedge	٨	^	^	^	\wedge	Λ						
Georgia	College Preparatory with Distinction Diploma	1	٨	^	٨	^	<u> </u>	Λ		\wedge				
Hawaii	High Schools That Work Award of Educational								٨					
	Achievement								>					
Idaho	Idaho College Admission Core	^	^	^	٧	1	^	^						
Illinois	None													
Indiana	Indiana Academic Honors Diploma	\wedge	٨	^	^	٨	^	^		\wedge				
	Indiana Core 40	V	7	V	>	1	γ	\						
Iowa	Iowa Coursework Requirements	Λ	\wedge	^	^	1	٨							
200 type p'400	واطمئه عمر في ممثوم مول مسمد فيمد الأنسير							•						

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Table 4. Detail on rigorous high school programs approved by the U.S. Department of Education, by state: 2006-07-Continued

		Ċ	nnaried	t dtiw u	he FD co	irse-had	Comparison with the ED course-based curriculum*	*						
		8	2010011				Math	Science						
			0	Curriculum	Ξ		courses	courses			Other req	Other requirements	S	
								Three						
							At least	years						
							three	with at			AP/IIB			
						Call-	jears	two.			comses	Specific		
						gaage ofbor	licidaling Labbar	2	0,000			20000		, 64,
		L				omer	aigebrai	5 -	olale		exallis exallis	sacores		Office
		Eng:	;		_	than	and a	biology,	exams		or dual	on		-uou
		lish	Math		<u></u>	English	higher-	chem-	or local		enroll-	PSAT/		course
States	Program name	(four years)	(three	(three years)	(three years)	(one year)	course	istry, or physics	assess- ments	GPA	ment	SAT or ACT	Senior	require- ment
Kansas	Kansas Scholars Curriculum	>	^	~	~	^	>	~						
Kentucky	Kentucky Commonwealth Diploma	>	>	>	~	^	>	>			>			
	Kentucky PreCollege Curriculum	>	>	7	>	^	>	~						
Louisiana	Academic Endorsement to Standard Diploma								~	>	~	~	>	
	TOPS/Regents High School Core Curriculum	>	~	7	~	٨	>	^						
Maine	Maine Course Work Program Number One	>	٨	^	~	^	>	^						
	Maine Course Work Program Number Two	>	>	v	v		>							
	Maine Advanced Placement Program										^			
	Maine Dual Enrollment Program									^	\wedge			
Maryland	None													
Massachusett	Massachusetts Certificate of Mastery								\wedge		^	Λ		^
	Board of Higher Education Admissions Criteria	$^{\wedge}$	^	\wedge	٧	٨	^	^						
Michigan	Michigan Merit Standard	^	٨	^	V	1	^	V						
Minnesota	Minnesota Coursework Requirements	^	^	\wedge	Λ	٨	^	^						
Mississippi	Dual Enrollment Program of Study									^	^			
Missouri	College Preparatory Studies Certificate	^	^	٧	\wedge		^			٨		^		
	High School Core Curriculum Requirements	$^{\wedge}$	^	٧	V	٨	^							
Montana	Montana Rigorous Core	^	٨	^	^	1	7	^						
Nebraska	None													
Nevada	Nevada Advanced Diploma	^	^	\	V	_				1				
New	Dual Enrollment Program									^	^			
New Jersey	None													
New Mexico	None													
New York	Regents Diploma with Honors/Advanced Designation	٨	^	>	٨	>			^					
North Carolina	North Carolina College/University Preparation Course of Study	>	٨	>	>	^	>	7						
100 to 10	الماصة عام الماصة عام مصومة عاص الماصة عام ا						•					•		

Cont'd. next page. See notes at end of table.

Table 4. Detail on rigorous high school programs approved by the U.S. Department of Education, by state: 2006-07-Continued

		ဒိ	nparisc	n with	the ED co	ourse-bas	Comparison with the ED course-based curriculum*	nm*						
							Math	Scionce						
			0	Curriculum	Ę		courses	courses			Other rec	Other requirements	s,	
								Throo						
							At least	years						
						:	three	with at			AP/IB			
						Lan-	years	two			courses	Specific		
						other	algebra	from	State		exams	Scores		Other
		Eng-		Sci-	Social	than	and a	biology.	exams		or dual	000		
		lish	Math		studies	English	higher-	chem-	or local		enroll-	PSAT/		course
States	Program name	(four years)	(three	(three years)	(three years)	(one year)	level	istry, or physics	assess- ments	GPA	ment	SAT or ACT	Senior project	require- ment
North Dakota	Admission Standards to Baccalaureate/Graduate	, ,	1	, ,	1		I.	T.						
	Institutions	>	>	>	7	_	>	7						
	Dual Enrollment Program									1	>			
Ohio	Ohio Honors Diploma	\wedge	^	Λ	\wedge	^	^	Λ		^		Λ		
Oklahoma	Oklahoma Certificate of Distinction	~	٨	٨	٨	٨	>	^	^	^				
	Oklahoma Higher Learning Access Program	~	>	٧	~	1	>							
	High Schools That Work Award of Educational								1,					
	Achievement								>					
Oregon	None													
Pennsylvania	Pennsylvania Certificate of Distinction								\wedge					
	Project 720 College and Career Prep Course	1.	/	15	/		1	10						
	Sequence	>	١	>	١		>	>						
	Dual Enrollment Program										^			
	Admission to State Institutions of Higher	^	^	^	^	^	^	r	^					
	High Schools That Work Award of Educational Achievement								^					
Rhode Island	None													
South	Academic Achievement Honors Award	~	٨	>	~	٨	>	~	>	~		^		
	College Preparatory Course Prerequisite Requirements	>	>	>	>	٨	>	>						
	High Schools That Work Award of Educational Achievement								7					
South Dakota	None													
Tennessee	Tennessee University Path Curriculum	\wedge	^	^	^	٨	>	^						
	Tennessee Dual Enrollment Program									٨	^			
Cont'd. next pag	Cont'd. next page. See notes at end of table.													

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Table 4. Detail on rigorous high school programs approved by the U.S. Department of Education, by state: 2006-07—Continued

		Ċ	mnarisc	n with	the FD C	irse-ha	Comparison with the ED course-based curriculum*	*#						
							Math	Science						
			٥	Curriculum	шr		courses	courses			Other requirements	uirement	s	
								Three						
							At least	years						
							three	with at			AP/IB			
						Lan-	years	least			courses			
						guage	including	two			ö	Specific		
						other	algebra I	from	State		exams	scores		Other
		Eng-		Sci-	Social	than	and a	biology,	exams		or dual	o		non-
		lish	Math	ence	studies	English	higher-	chem-	or local		enroll-	PSAT/		course
		(four	(three	(three	(three	(one	level	istry, or	-		ment	SAT or	Senior require	eduire-
States	Program name	years)	years)	years)	years)	year)	course	physics	ments	GPA c	courses	ACT	project	ment
Texas	Texas Distinguished Achievement Diploma	$^{\wedge}$	\wedge	^	٨	٨	r	Λ						
	Recommended High School Program	\wedge	Λ	٨	٨	٨	\wedge	Λ						
Utah	Utah Concurrent Enrollment Program									^	^			
Vermont	None													
Virginia	Virginia Advanced Studies Diploma	^	٨	٨	٨	^	٨	Λ						
	Virginia Coursework Requirements	^	^	^	^	-	٨	Λ						
Washington	Washington Scholar Designation													\wedge
	Washington Coursework Requirements	^	$^{\wedge}$	٧	Λ	1	r							
West Virginia	West Virginia PROMISE	^	^	^	٨	1	r	Λ		^		^		
	Earn a Degree - Graduate Early (EDGE)	^	^	^	^	1	\wedge	Λ	Λ					
	Dual Credit Program	^	^	^	^	1	\wedge	Λ			^			
	High Schools That Work Award of Educational								10					
	Achievement								>					
Wisconsin	Wisconsin Coursework Requirements	$^{\wedge}$	\wedge	^	^	٨	\wedge	Λ						
	Wisconsin Dual Enrollment Program									^	^			
Wyoming	Advanced Endorsement Diploma								^					
	Assured Admission to the University of Wyoming	^	^	^	^	1	٨	V						

* "\" indicates that the state program required the same number of courses, ">" that it required more, "<" that it required fewer, and "—" that there was no requirement in that subject. SOURCE: U.S. Department of Education Web site: http://www.ed.gov/admins/finaid/about/ac-smart/state-programs06.html and selected State Department of Education Web sites.

programs required three years of science and social studies, although a few specified more or fewer. Of the programs requiring three years of science, a majority required that at least two courses be chosen from biology, chemistry, or physics (the same as required in the ED course-based curriculum).

Approved state programs differed from the ED course-based curriculum most notably in the language requirement, tending to have either no language requirement at all or to require more than one year of language. Many state program requirements gave students a choice of subjects, such as a language other than English, art, or performing arts. Because students could avoid taking another language, the program was not considered here to require a language other than English.

Some approved state programs appeared to be more demanding than the ED course-based curriculum, and some appeared to be less demanding but meaningful comparisons are difficult.

Table 5 compares the requirements for course-based approved state programs with those of the ED course-based curriculum, considering only the core subjects mentioned in the latter. State programs that required more courses in one or more of the subjects and at least the same number in all of the rest were considered more rigorous. State programs that required fewer courses in one or more subjects and the same in the others were considered less rigorous. State programs that had higher requirements in some subjects but had lower ones in others were categorized as difficult to compare. The comparisons are summarized in Figure 3, which shows that of the 35 states with course-based approved programs, just 13 states had approved programs that were at least as rigorous as the ED course-based curriculum. Another 16 states had at least one approved program that was less rigorous, most often because it did not require students to take a language other than English (Table 4). However, it is not certain whether course work standards for students were less rigorous in those states, making easier to qualify for an ACG there. Some state programs had credit requirements in other subjects or requirements in addition to credits, such as minimum GPAs or state exams that could make qualifying more difficult. Also, nothing is documented about the content of the courses in any state.

Table 5. Summary of options for qualifying for an ACG and comparison of approved state programs to ED course-based curriculum, by state: 2006-07

	Fec	Federal options	45		State-re with ED	quired co	State-required courses compared with ED course-based curriculum	mpared	State program has non-course work	am has e work
	State	ED course-						Difficult		Instead
S	Scholars	based	0/0	Consider Control of Co	More	Similar	Less		In addition	of
Ja		>	7	Advanced Academic Endorsement	2006ii	B	Sporos		>	225 1100
				High Schools That Work Award of Educational Achievement				^	7	
Alaska		>	>	None						
Arizona	^	>	>	Dual Credit Coursework Program						7
Arkansas	7	>	>	Academic Challenge Core Curriculum	>				>	
				Coursework Option			7			
California		>	>	California Golden State Seal Merit Diploma						7
				A–G Requirements				~		
Colorado	٨	>	7	Higher Education Admissions Requirements			>			
Connecticut	٨	>	7	Dual Enrollment Program						7
				Technical High School System Program			7		7	
Delaware		^	\wedge	Distinguished Achievement Diploma						\nearrow
				Delaware Coursework Requirements		^				
				High Schools That Work Award of Educational Achievement				\wedge	Λ	
D.C.		^	\triangle \triangle	None						
Florida		\nearrow	Λ	Bright Futures Program	Λ					
Georgia		^	\triangle \triangle	College Preparatory with Distinction Diploma	^				\wedge	
Hawaii		^	Λ	High Schools That Work Award of Educational Achievement				^	^	
Idaho		>	7	Idaho College Admission Core			~			
Illinois		\wedge	Λ	None						
ndiana	٨	^	7	Indiana Academic Honors Diploma	Λ				Λ	
				Indiana Core 40			Λ			
lowa		\nearrow	Λ	lowa Coursework Requirements			Λ			
Kansas		^	٨	Kansas Scholars Curriculum	٨					
Kentucky	٨	>	7	Kentucky Commonwealth Diploma			>		>	
				Kentucky PreCollege Curriculum	Λ					
Louisiana	٨	^	٨	Academic Endorsement to Standard Diploma						^
				TOPS/Regents High School Core Curriculum	٨					
Maine		\nearrow	Λ	Maine Course Work Program Number One	Λ					
				Maine Course Work Program Number Two			Λ			
				Maine Advanced Placement Program						Λ
				: : : : : : : : : : : : : : : : : : :						

Cont'd. next page. See notes at end of table.

Table 5. Summary of options for qualifying for an ACG and comparison of approved state programs to ED course-based curriculum, by state: 2006-07—Continued

State Scholars States Initiative Maryland Massachusetts Michigan Minesota Missouri Missouri Montana Nebraska New Hampshire New Jersey New Jersey	ED course-					41		
an ota iippi ri ri Ra Ra ampshire						DIFFICUIT		Instead
orbusetts chusetts an ota iippi ri ri Ra ka ampshire	based	AP/IB	Approved state options	More	Less Similar rigorous	to compare	In addition to courses	of
	>	7	None					
oshire	>	>	Massachussetts Certificate of Mastery					>
i i sahire			Board of Higher Education Admissions Criteria			~		
i i sahire	7	>	Michigan Merit Standard			~		
a mpshire	>	>	Minnesota Coursework Requirements	>				
a mpshire	>	>	Dual Enrollment Program of Study					>
	>	>	Missouri College Preparatory Studies Certificate		^		>	
						\nearrow		
	^	^	Montana Rigorous Core			^		
New Hampshire New Jersev	^	^	None					
New Hampshire Vew Jersev	7	>	Nevada Advanced Diploma		~		>	
New Jersev	^	^	Dual Enrollment Program					^
	٨	^	None					
New Mexico	^	\wedge	None					
New York	^	7	Regents Diploma with Honors/Advanced Designation		Λ		^	
North Carolina	^	\wedge	College/University Preparation Course of Study	Λ				
North Dakota	^	Λ	Admission Standards to Baccalaureate/Graduate Institutions		Λ			
			Dual Enrollment Program					٨
Ohio	7	>	Ohio Honors Diploma	~			>	
Oklahoma √	\	Λ	Oklahoma Certificate of Distinction	٨			^	
			Oklahoma Higher Learning Access Program		Λ			
			High Schools That Work Award of Educational Achievement	t		Λ	^	
Oregon	\wedge	\wedge	None					
Pennsylvania	^	^	Pennsylvania Certificate of Distinction					V
			Project 720 College and Career Prep Course Sequence			Λ		
			Dual Enrollment Program					^
			Admission to State Institutions of Higher Education	٨				
			High Schools That Work Award of Educational Achievement	1		Λ	\wedge	
Rhode Island ee	^	\wedge	None					
South Carolina	^	^	Academic Achievement Honors Award	Λ			^	
			College Prep Course Prerequisite Requirements	Λ				
			High Schools That Work Award of Educational Achievement	-		^	^	

Cont'd. next page. See notes at end of table.

Summary of options for qualifying for an ACG and comparison of approved state programs to ED course-based curriculum, by state: 2006-07—Continued Table 5.

					State-required courses compared	ed course	es compai	F	State program has	am has
	Fe	Federal options			with ED course-based curriculum	rse-base	d curricul		non-course work	work
	State	ED course-					Diffi	Difficult		Instead
	Scholars	pased			More	<u>د</u>	Less to	to In a	In addition	o
States	Initiative	Initiative curriculum AP/IB	AP/IB	Approved state options	rigorous Sim	ilar rigo	Similar rigorous compare		to courses (courses
South Dakota		^	~	None						
Tennessee	٨	7	^	Tennessee University Path Curriculum	7					
				Tennessee Dual Enrollment Program						7
Texas		^	>	Texas Distinguished Achievement Diploma	7					
				Recommended High School Program	r					
Utah	٨	7	^	Utah Concurrent Enrollment Program						٨
Vermont		\wedge	\wedge	None						
Virginia	Λ	Λ	^	Virginia Advanced Studies Diploma	Y					
				Virginia Coursework Requirements			Λ			
Washington	Λ	Λ	\wedge	Washington Scholar Designation						٨
				Washington Coursework Requirements			^			
West Virginia	^	Λ	^	West Virginia PROMISE		,	/		^	
				Earn a Degree—Graduate Early (EDGE)		,	^		^	
				Dual Credit Program			/			٨
				High Schools That Work Award of Educational Achievement			1	<u>۸</u>	^	
Wisconsin		\wedge	^	Wisconsin Coursework Requirements	\wedge	/				
				Wisconsin Dual Enrollment Program						Λ
Wyoming		Λ	^	Advanced Endorsement Diploma						٨
				Assured Admission to the University of Wyoming			1			

SOURCE: U.S. Department of Education Web site: http://www.ed.gov/admins/finaid/about/ac-smart/state-programs06.html and selected State Department of Education Web sites. Comparison to ED course-based curriculum and noncoursework criteria derived from Table 1.

Number of states 50 40 35 33 30 27 30 17 20 13 10 0 Four years Three years Three years Three years One year of a All of these of English of matheof science^b of social language requirements maticsa studies other than

Figure 3. Among the 35 states with course-based approved rigorous programs, number of states in which the course requirements of the least rigorous approved program matched or exceeded the ED course-based curriculum: 2006

NOTE: Based on 35 of the 36 states with curriculum-based approved programs. Hawaii was not included because it had only the *High Schools That Work* Award, which is difficult to compare with the ED course-based curriculum. SOURCE: U.S. Department of Education Web site: http://www.ed.gov/admins/finaid/about/ac-smart/state-programs06.html and selected State Department of Education Web sites.

English

State High School Graduation Requirements

High school graduation policies vary considerably from state to state.

A few states leave graduation requirements entirely up to local districts, but most specify the number of credits needed in total and in certain subjects. Table 6 provides the number of courses required in each state in each of the five subject areas named in the ACG eligibility requirements, along with the total number of credits required for a standard high school diploma. In ostate are high school graduation requirements currently as rigorous as the ED course-based curriculum. In other words, merely meeting the minimum requirements for graduating from high school would not be sufficient to make a student eligible for an ACG

^a Including algebra I and a higher-level course.

^b Including at least two courses from biology, chemistry, or physics.

³⁸ This information was obtained from a database maintained by the Education Commission of the States (ECS) and is available at: http://mb2.ecs.org/reports/Report.aspx?id=735. The ECS gathered the baseline information in 2005 and updates it as new policies are enacted. These data reflect the requirements based on the August 2006 update, just before the first ACGs were awarded.

Table 6. Graduation requirements for a standard high school diploma, by state: 2006

		Uni	its by sub	ject				Exit exam
States	English	Math	Science	Social	Lan- guage other than English	Total units	Course requirement changes will apply to the class of	based on standards for 10th grade or higher
Alabama	4	4	4	4	0	24		
Alaska	4	2	2	3	0	21		0
Arizona	4	2	2	2.5	0	20		V
Arkansas	4	3	3	3	0	21	2009, 2010	
California	3	2	2	3	0	13		0
Colorado	Ť		-		_	_	2007	
Connecticut	4	3	2	3	0	20		
Delaware	4	3	3	3	0	22	2011, 2013	
D.C.	4	3	3	3.5	2	23.5	2008	
Florida	4	3	3	3	0	24	2011	
Georgia	4	4	3	3	2*	22	2011	0
Hawaii	4	3	3	4	0	22	2010	
Idaho	4.5	2	2	2.5	0	21	2010	√
Illinois	3	2	1	2	0	16	2009, 2010, 2011	,
Indiana	4	2	2	2	0	20	2010, 2011	
lowa				1.5		_	2011	
Kansas	4	2	2	3	0	21	2009	
Kentucky	4	3	3	3	0	22	2012	
Louisiana	4	3	3	3	0	23	2009	0
Maine	4	2	2	2	0	16	2007, 2010	
Maryland	4	3	3	3	0	21	2007, 2010	
Massachusetts	_							V
Michigan				0.5		_	2011, 2016	٧
Minnesota				0.5		21.5	2008, 2011, 2015	
Mississippi	4	3	3	3	0	20	2009, 2012	V
Missouri	3	2	2	2	0	22	2010	٧
Montana	4	2	2	2	0	20	2010	
Nebraska	4				0	200 credit hours		
Nevada	4	3	2	2		22.5		0
	4	2	2	2.5	0	19.75		O
New Hampshire New Jersey	4	3	3	3	0	22	2008	√
i -	4	3	2	3	0	23	2009	V
New Mexico New York	4	3	3	4	1	22	2009	
	4	4	3	3	2*			0
North Carolina	4	4	3	3		20 21		
North Dakota		3	3	3	0			
Ohio Oklahoma	4	3	3	3	0	21	2010	
Oklahoma						23	2010	
Oregon	3	2	2	3	0	22	2010	
Pennsylvania	 		<u> </u>			<u> </u>	0000	
Rhode Island	4	3	2	2	2	18	2008	ı
South Carolina	4	4	3	3	2*	24	0000 0040	√
South Dakota	4	2.5	2.5	3	0	22	2008, 2010	1
Tennessee	4	3	3	3	2*	20		$\sqrt{}$

Cont'd. next page. See notes at end of table.

		Uni	its by sub	ject				Exit exam
					Lan-		Course	based on
					guage		requirement	standards
					other		changes	for 10th
				Social	than		will apply	grade or
States	English	Math	Science	studies	English	Total units	to the class of	higher
Texas	4	3	2	3	0	22	2008	$\sqrt{}$
Utah	3	2	2	2.5	0	15	2011	
Vermont	4	3	3	3	0	20		

0

0

0

0

0

19

24

13

13

2008

2008, 2009, 2010

Table 6. Graduation requirements for a standard high school diploma, by state: 2006—Continued

3

2.5

3

3

2

3

2

3

3

2

3

2

3

3

4

4

4

Virginia

Washington

Wisconsin

Wyoming

West Virginia

SOURCE: Course requirements: Education Commission of the States. Retrieved Jan. 2007 from http://mb2.ecs.org/reports/Report.aspx?id=735. The information was gathered in 2005 and is updated as new policies are enacted. Information shown here based on requirements for 2006–07. State exit exam requirements: Center on Education Policy (2007), Table 1.

in any state. The language requirement for the ACG is a major reason, because only a few states require any credits in a language other than English. Many states require the same *number* of credits in English, mathematics, science, and social studies as does the ED course-based program (Figure 4), and six states require the same number of courses in all these subjects (Table 6). However, states often do not specify the *level* of the courses in which those credits must be earned.

The implications of state differences in high school graduations requirements for ACG participation are difficult to ascertain.

One might expect higher ACG participation in the states with the most rigorous high school graduation requirements but comparing states on these grounds is difficult. Some states simply specify a number of credits needed for a diploma, while others specify a particular level that must be reached in some or all subjects or describe content that must be included. Another factor that complicates comparisons is that these requirements are sometimes minimums, with local districts adding their own requirements. Consequently, the state minimum may not be a true reflection of what some or even most high school graduates in that state are actually required to complete. Yet another complicating factor is that some states have exit exams in addition to course requirements, and the content of these exams varies (Center on Education Policy 2007). Because of the difficulty in comparing states, it is not feasible to categorize states definitively according to the rigor of their requirements or to compare planned changes.

 $[\]sqrt{}$ Standards for 10th grade or higher required for all subjects.

o Standards less than 10th grade in one or more subjects.

⁻ No state-determined requirements.

^{*} Required for college prep program.

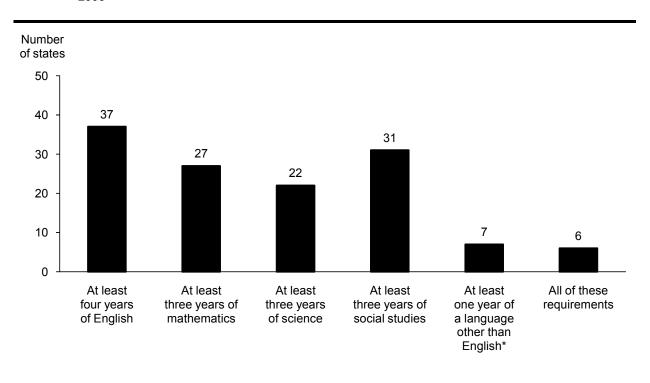


Figure 4. Number of states requiring courses in various subjects for a standard high school diploma in 2006

Conclusion

Considerable variation exists across states in the rigor of the approved state programs and in high school graduation requirements. Differences in ACG eligibility and participation rates can therefore be expected now and over time. Additional states may request approval for new programs, and states may add new options for qualifying or change requirements for already approved programs. In addition, many states are increasing their high school graduation standards, requiring students to complete more courses or more difficult courses. It will be important to monitor these changes because they may help to explain state differences in ACG participation rates. It is possible that high school graduation requirements in some states could eventually increase to a point when all graduates would meet the course requirements for an ACG, in which case high ACG participation rates would be expected.

^{*} In four of these states, a language other than English was required only for a college prep program. SOURCE: Course requirements: Education Commission of the States. Retrieved January 2007, from http://mb2.ecs.org/reports/Report.aspx?id=735. The information was first gathered in 2005 and is updated as new policies are enacted. Information shown here based on requirements for 2006–07. State exit exam requirements: "Diplomas Count," *Education Week*, June 22, 2006.

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CHAPTER 4

ACG and National SMART Grant Participation in 2006–07

This chapter presents an overview of the participation in the Academic Competitiveness Grant (ACG) and National Science and Mathematics Access to Retain Talent (National SMART) Grant programs in 2006–07, the first year of their implementation. The analysis is based on data provided by the Office of Federal Student Aid. The file used contains student-level records of all Pell Grant recipients, merged with information from the Free Application for Federal Student Aid (FAFSA) and ACGs and National SMART Grants awarded for the 2006–07 academic year (see Appendix D for more details).

All of the students who received these grants also received Pell Grants, which are only awarded to low- and moderate-income students.³⁹ The analysis sometimes compares ACG and National SMART Grant recipients with other Pell Grant recipients who did not receive ACGs or National SMART Grants, and at other times it shows the percentage of all Pell Grant recipients who also received an ACG or National SMART Grant. All Pell Grant totals and comparisons are limited to those institutions that participated in the ACG or National SMART Grant programs. Participating institutions are defined as those that awarded at least one ACG or National SMART Grant. It should be noted that Pell Grant students are not required to be enrolled full-time, but those with ACGs or National SMART Grants are. The information summarized in the text and figures that follow is shown in much more detail in the tables in Appendix E.

ACG Program

In 2006–07, about 2,800 institutions participated in the ACG program, and almost 300,000 Pell Grant recipients were awarded an ACG.

The U.S. Department of Education identified about 3,600 postsecondary institutions that awarded associate or bachelor's degrees, were eligible to participate in the Federal Pell Grant program, and were therefore also eligible to participate in the ACG program in 2006–07. About 2,800 of these institutions (78 percent) participated—that is, they awarded at least one ACG. Institutions participating in the Pell Grant program were required to participate in the ACG

³⁹ The maximum Pell Grant is set legislatively but depends on federal appropriations for the program. In 2006–07, it was \$4,050, the level it had been since 2003–04 (U.S. Department of Education 2007). Not all students eligible for Pell Grants receive them. Some do not apply for them and others do not follow through on steps such as income verification. In addition to losing the opportunity for a Pell Grant, these students may also be foregoing an ACG or National SMART Grant.

program, but not all institutions that awarded Pell Grants would necessarily have students who qualified for an ACG, especially those offering primarily certificate programs (as do many private institutions). Public four-year institutions and public two-year institutions had the highest participation rates (94 and 87 percent, respectively), and for-profit two-year institutions had the lowest rates (28 percent) (Figure 5). Participating institutions enrolled about 4.5 million Pell Grant students, representing over 90 percent of the total 4.9 million Pell Grants awarded at all ACG-eligible institutions. Additional details about institutional participation are provided in Appendix Table E-1.

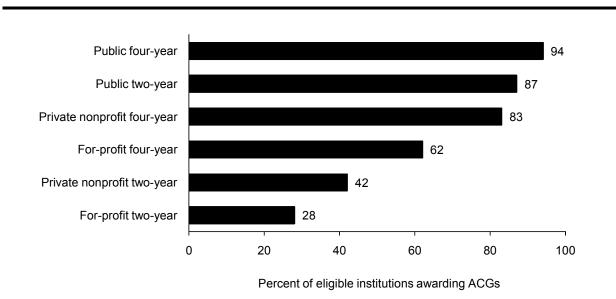


Figure 5. Percentage of eligible institutions awarding ACGs, by type of institution: 2006-07

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Of the 300,000 ACG recipients, 174,000 (more than half) were enrolled in public four-year colleges, 76,000 in private nonprofit four-year colleges, and 36,000 in public two-year colleges. Most of the rest were at four-year for-profit colleges (11,000), and the remainder were at private for-profit or not-for-profit two-year institutions. At the public and private nonprofit four-year colleges participating in the ACG program, about one-quarter of all first- and second-year students with Pell Grants also received an ACG; at the public two-year institutions, only 3 percent of the first- and second-year Pell Grant students did so (Figure 6). Students at two-year institutions are less likely to enroll full-time (Horn and Nevill 2006) and, even when enrolled full-time, are less likely to have completed a rigorous program (Appendix Table F-2). Additional details about the number of recipients are presented in Appendix Table E-2.

Private nonprofit four-year

Private nonprofit two-year

Private nonprofit two-year

Public two-year

For-profit four-year

1

For-profit two-year

0 10 20 30 40 50

Percent of first- and second-year Pell Grant recipients who received ACGs

Figure 6. Percentage of first- and second-year Pell Grant recipients who also received an ACG, by type of institution attended: 2006–07

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

About 80 percent of first-year ACG students received the maximum \$750 award, and about 70 percent of second-year ACG students received the maximum \$1,300 award.

ACG, National SMART, and Pell Grants are disbursed to students on a term-by-term basis. Students in colleges with typical semester calendars receive one-half of the award for each semester enrolled, or one-third of an award for each trimester. Among the first-year ACG students, 83 percent were enrolled for the entire academic year and received the maximum \$750; 1 percent were enrolled for two trimesters and received \$500 (two-thirds); 14 percent were enrolled for one semester and received \$375 (one-half of the maximum); 1 percent were enrolled for one trimester and received \$250; and the remaining 1 percent received some other amount (Figure 7). The average ACG amount for first-year students was \$685.

Among second-year ACG students, 72 percent were enrolled for the entire academic year and received the maximum \$1,300; 2 percent were enrolled for two trimesters and received \$867 (two-thirds); 20 percent were enrolled for one semester and received \$650 (one-half of the maximum); and the remaining 6 percent received some other amount. The average ACG for second-year students was \$1,125.

Percent 100 5 14 20 80 2 ■Other amounts 60 ■One-third (\$250/\$433) One-half (\$375/\$650) 83 40 72 □Two-thirds (\$500/\$867) ■Full award (\$750/\$1,300) 20 0 First year Second year ACG recipients ACG recipients

Figure 7. Percentage distribution of first- and second-year ACG recipients by amount received: 2006–07

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

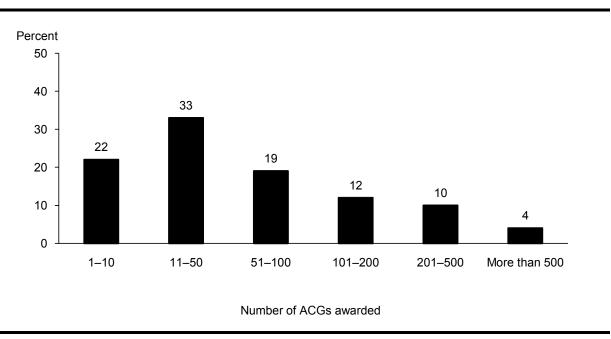
There are a number of reasons why students may have received one-half or two-thirds of a total award. Some of the students dropped out after one semester, and some were first enrolled in the second semester. About 2 percent of ACG students (4,600 students) changed class level during the year and received \$375 for the first term and \$650 for the second term (\$1,025 total). Among second-year students, some were only eligible for one semester because they became third-year students in the second semester. For example, about 1,700 students received a one-half ACG (\$650) in the first term as second-year students, and then a one-half National SMART Grant (\$2,000) in the second term as third-year students.

The amounts other than full-year, one-half of a year, or two-thirds of a year either reflect other calendar systems (such as nontraditional calendars, for which the appropriate partial term amounts cannot be determined) or awards that were reduced because the full amount would have exceeded the students' need. The low proportion of students in this category (1 percent) indicates that very few (if any) ACG recipients had their grant restricted because their need was exceeded.

There was a wide range in the number of grants awarded at institutions, but about half of all participating institutions awarded fewer than 50 grants.

Participating institutions awarded an overall average of 107 ACGs, with an average of 335 at public four-year colleges, 93 at private nonprofit four-year colleges, and 41 at public two-year colleges (Appendix Table E-3). Overall, about half of all participating institutions awarded fewer than 50 ACGs (Figure 8 and Appendix Table E-4). Public four-year institutions handled higher volumes than other types of institutions, with about half awarding 200 or more ACGs. See Appendix Table E-5 for additional details on the distribution of ACGs.

Figure 8. Percentage distribution of institutions participating in the ACG program by the number of ACGs awarded: 2006–07



NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

About three-quarters of all ACGs were awarded to first-year students.

Overall, 76 percent of ACGs awarded in 2006–07 went to first-year students (Figure 9). Second-year recipients had to meet the same requirements as first-year recipients and also had to have a GPA of at least 3.0 at the end of their first year. The fact that many fewer second-year students than first-year ones received ACGs in 2006–07 suggests that many second-year students were unable to meet the GPA requirement. Other contributing factors might be less awareness of the program among second-year students or institutional difficulties in verifying the high school course-taking of second-year students, but there is no particular evidence to support either.

Because the ACG program was not in effect when 2006–07 second-year students were in their first year, they would not have been aware at that time (2005–06) that an ACG would be available to them in 2006–07 if they earned a 3.0 GPA. In contrast, first-year ACG recipients in 2006–07 may have been motivated by their grant to earn a 3.0 GPA and maintain full-time enrollment in order to keep it. If this was the case, the proportion of grants awarded to second-year students should increase in 2007–08.

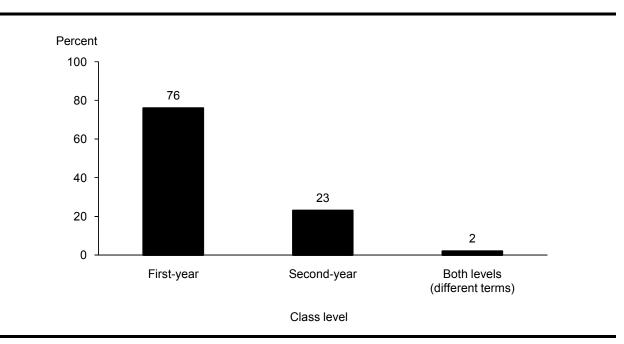


Figure 9. Percentage distribution of ACG recipients by class level: 2006-07

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

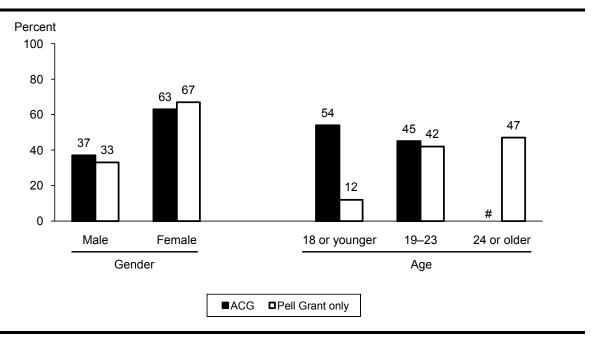
Over 60 percent of the ACG recipients were women, and over half were age 18 or younger.

In the ACG program and the Pell Grant program in general, the majority of the students were women. Among the first- and second-year students with ACGs, 63 percent were women, and among those who received only Pell Grants (no ACG), 67 percent were women (Figure 10). Appendix Table E-8 presents more details.

Because the ACG program requires students to be recent high school graduates and to be in their first two years of college, it is not surprising that 54 percent of ACG students were age 18 or younger, and nearly all of the rest were between age 19 and 23. In contrast, among the first- and second-year Pell Grant students who did not receive an ACG, nearly one-half were age 24 or older. Reflecting their age, 96 percent of the ACG recipients were dependent students, in contrast

to 41 percent of first- and second-year students who only received Pell Grants and no ACGs (Appendix Table E-9).

Figure 10. Percentage distributions of ACG recipients and students who received only Pell Grants at ACG-participating institutions by gender and age: 2006–07



Rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Although all ACG recipients were from lower-income families, they tended to come from families with higher incomes than students who received only Pell Grants.

Seventeen percent of the dependent ACG recipients came from families with incomes over \$40,000, compared with 10 percent of the first- and second-year students who received only Pell Grants. In addition, 19 percent of the dependent ACG recipients came from families with incomes under \$10,000, compared with 28 percent of the Pell Grant students who did not receive an ACG (Figure 11 and Appendix Table E-9).

Percent 50 40 28 30 23 22 19 20 15 10 0 Less than \$10,000-\$20,000-\$30,000-\$40,000-\$50,000 \$10,000 19,999 29,999 39,999 49,999 or more Income of dependent students' parents ■ACG □ Pell Grant only

Figure 11. Percentage distribution of dependent ACG recipients and dependent students who received only Pell Grants at ACG-participating institutions by parents' income: 2006–07

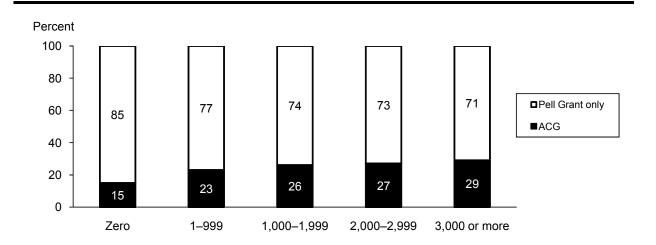
NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

The federal Expected Family Contribution (EFC) is a measure⁴⁰ of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. The EFC is used to determine the Pell Grant amount. Students with a zero EFC are the neediest, and are therefore eligible for the maximum Pell Grant award. Among dependent first- and second-year Pell Grant recipients, the percentage of students who received an ACG was directly related to the EFC level. Among students with a zero EFC, 15 percent received an ACG; among students with an EFC of 3,000 or more, 29 percent received an ACG (Figure 12 and Appendix Table E-10).

⁴⁰ The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. It is used as an index number.

Figure 12. Of all dependent first- and second-year Pell Grant recipients at ACG-participating institutions, percentage who received ACGs and only Pell Grants, by Expected Family Contribution (EFC): 2006–07



Dependent student EFC

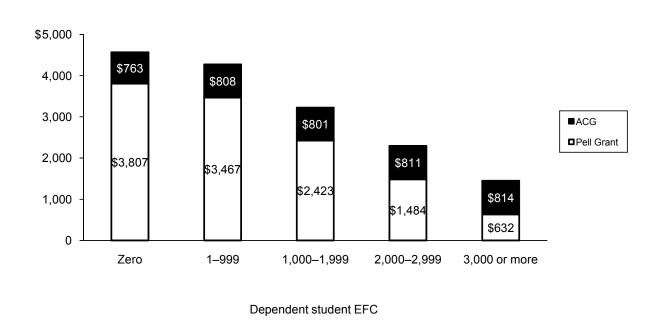
NOTE: The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. The EFC is used as an index number and is used to determine the Pell Grant amount. The average family incomes corresponding to these EFC categories were \$9,900, \$21,500, \$31,400, \$36,300, and \$40,400. SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Dependent students with a zero EFC received a somewhat lower average ACG than students with higher EFCs, but they received a larger average combined Pell Grant and ACG amount and about one-third of the total ACG dollars.

Dependent ACG students with a zero EFC received an average ACG Grant of \$760, while students with a higher EFC received a little more than \$800 on average (Figure 13 and Appendix Table E-10). However, students with a zero EFC received the largest average amount of combined ACGs and Pell Grants (\$4,600). The combined average amount decreased as the EFC increased because the Pell Grant amount (which is based on the EFC) decreased. Students with an EFC⁴¹ of 3,000 or higher received somewhat more from their ACGs (\$810) than their Pell Grants (\$630).

⁴¹ The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. It is used as an index number.

Figure 13. Average grant amounts awarded to dependent first- and second-year students with ACGs, by Expected Family Contribution (EFC): 2006–07



NOTE: The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. The EFC is used as an index number and is used to determine the Pell Grant amount. The average family incomes corresponding to these EFC categories were \$9,900, \$21,500, \$31,400, \$36,300, and \$40,400. SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Figure 14 and Appendix Table E-11 present how ACG and Pell Grant dollars are spread across EFC levels. Students with a zero EFC received 46 percent of all Pell Grant dollars and 32 percent of the ACG dollars. Students with an EFC of 1,000 or more received a greater share of ACG dollars than Pell Grant dollars. See Appendix Table E-12 for more detail.

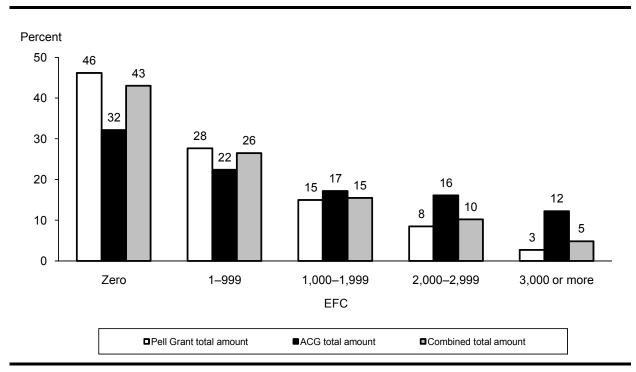


Figure 14. Percentage distribution of Pell Grant and ACG dollars for dependent first- and second-year students by Expected Family Contribution (EFC): 2006–07

NOTE: The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. The EFC is used as an index number and is used to determine the Pell Grant amount. The average family incomes corresponding to these EFC categories were \$9,900, \$21,500, \$31,400, \$36,300, and \$40,400. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

The most common way to qualify for an ACG was to complete the ED course-defined high school curriculum.

Figure 15 displays the percentage of ACG recipients who qualified by various criteria. The majority (57 percent) of the ACG recipients qualified on the basis of completing the ED course-based curriculum. Another 35 percent qualified by meeting the requirements of a state-designated program of courses, and the remaining 5 percent on the basis of AP or IB courses. About 2 percent each qualified through the State Scholars Initiative in a participating state or the way they qualified was unclear. ⁴² It should also be noted that many students would have qualified on more than one basis, and the one that was reported was decided by the college attended (presumably, the easiest one to identify).

⁴² These recipients were coded as meeting Department of Defense (DoD) criteria. While some students may have qualified in this way, the number reported in this category (5,400) exceeds the number of high school seniors enrolled in DoD schools in 2006 (3,300) (http://www.dodea.edu/datacenter/enrollment_display.cfm). This suggests some coding errors.

State
Scholars
Unknown
2%

AP or IB
5%

State
program
35%

ED course-defined curriculum
57%

Figure 15. Percentage distribution of ACG recipients by type of qualification for an ACG: 2006-07

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Participation rates varied widely by state.

Table 7 shows how the states rank by the percentage of first- and second-year Pell Grant recipients at four-year institutions who also received an ACG and were residents of that state (irrespective of whether they attended a college in the same state). The percentage ranged from a high of 32 percent (Massachusetts residents) to a low of 4 percent (Alaska residents). Table 7 also displays which states had an approved rigorous high school program that was aligned with the standards for admission to a public four-year college in that state. As discussed later in Chapter 6, the Department of Education has encouraged states to submit admission standards for approval as rigorous as a way to increase ACG participation. Of the states with the five highest ACG award rates, three (Massachusetts, California, and Pennsylvania) had their four-year college admission standards approved as rigorous for the purpose of determining ACG eligibility. However, of the 17 states that had their standards accepted as rigorous, 11 had lower than average ACG award rates. Thus, having admission standards approved does not appear, in itself, to be sufficient to promote high ACG participation.

Table 7. Number of first- and second-year students at four-year institutions with Pell Grants, number and percentage of Pell Grant recipients with ACGs, and states with rigorous admissions programs, by state of student's residence: 2006–07

	Number of		Percent of first-	State has approved
	first- and	Number of	and second-	rigorous high school
	second-year	Pell Grant	year Pell Grant	program based on
State of student's	students with	recipients	recipients	four-year college
residence	Pell Grants	with ACGs	with ACGs	admissions standards
Total	1,414,861	261,933	18.5	
Massachusetts	19,904	6,362	32.0	\checkmark
Nebraska	8,819	2,574	29.2	
California	95,996	27,626	28.8	\checkmark
Pennsylvania	53,041	14,903	28.1	\checkmark
Vermont	2,796	737	26.4	
Iowa	12,166	3,195	26.3	
Wisconsin	22,180	5,615	25.3	
Maine	7,853	1,947	24.8	
North Carolina	37,377	9,110	24.4	$\sqrt{}$
New Jersey	28,240	6,879	24.4	
Minnesota	21,137	5,028	23.8	
Connecticut	9,484	2,153	22.7	
South Carolina	21,076	4,498	21.3	$\sqrt{}$
Ohio	63,483	13,256	20.9	,
Oregon	10,193	2,106	20.7	
New Hampshire	4,724	976	20.7	
North Dakota	4,416	911	20.6	\checkmark
All others	5,257	1,072	20.4	V
Maryland	16,585	3,363	20.3	
Kansas	11,335	2,288	20.2	
Louisiana	28,258	5,700	20.2	
Texas	104,268	20,816	20.0	
Virginia	24,219	4,781	19.7	
Rhode Island	3,997	786	19.7	
New York	108,301	21,025	19.4	
South Dakota	5,939	1,143	19.2	
Illinois	48,377	9,046	18.7	
	17,831		17.7	\checkmark
Washington Indiana	40,500	3,149	17.7	V
		7,093		
Kentucky	24,955	4,325	17.3	V
Colorado	18,013	2,998	16.6	√ -/
Wyoming	1,269	210	16.5	√ -/
Oklahoma	20,093	3,320	16.5	\checkmark
Mississippi	13,038	2,101	16.1	.1
Georgia	53,979	8,662	16.0	V
Arkansas	19,240	3,067	15.9	V
Tennessee	32,057	4,861	15.2	V
Missouri	28,506	4,209	14.8	$\sqrt{}$
Hawaii	4,071	578	14.2	
Montana	7,237	996	13.8	1
Idaho	10,830	1,476	13.6	V

Cont'd. next page. See notes at end of table.

Table 7. Number of first- and second-year students at four-year institutions with Pell Grants, number and percentage of Pell Grant recipients with ACGs, and states with rigorous admissions programs, by state of student's residence: 2006–07—Continued

State of student's residence	Number of first- and second-year students with Pell Grants	Number of Pell Grant recipients with ACGs	Percent of first- and second- year Pell Grant recipients with ACGs	State has approved rigorous high school program based on four-year college admissions standards
Puerto Rico	82,634	11,110	13.4	
West Virginia	12,506	1,578	12.6	$\sqrt{}$
Delaware	2,748	334	12.2	
District of Columbia	3,366	393	11.7	
Florida	106,901	12,092	11.3	
Nevada	5,688	642	11.3	
Alabama	22,944	2,286	10.0	
Michigan	57,700	5,706	9.9	
Arizona	15,619	1,144	7.3	
New Mexico	14,905	964	6.5	
Utah	15,317	622	4.1	
Alaska	3,493	121	3.5	

NOTE: This table is based on unduplicated records. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 5 at four-year institutions were excluded. SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Appendix Table G-1 displays participation data by state arranged alphabetically (including students in both two- and four-year institutions) and Appendix Table G-2 shows data by state for students in two-year institutions, ranked by ACG participation rate at the two-year level.

With such a wide range of types of ACG qualification within different states, it will be an analytic challenge to demonstrate a relationship between ACG participation and state high school standards.

Table 8 shows the states ranked by percentage of resident first- and second-year Pell Grant students who received an ACG—including students at both two- and four-year institutions—and shows the number and percentage distribution of ACG recipients by type of ACG qualification. There are major variations by the students' state of residence, but there is no clear relationship between ACG participation rates and the type of qualification. For example, Tennessee and Mississippi student residents have the highest rates of qualification through the State Scholars Initiative, but they rank below average in ACG participation. The data in this table also highlight a problem in assuming that the student's state of residence is the same as the state where the student attended high school. About 2,000 ACG recipients qualified on the basis of state-designated programs that were not the same as their state of residence.⁴³

— 60 **—**

⁴³ They may have attended boarding schools in another state, for example.

Number and percentage of Pell Grant recipients who also received an ACG and the number and percentage distribution of ACG recipients by type of qualification, by state of student's residence: 2006–07 Table 8.

	Total	Percent of first- and	Number of	Number of ACG recipients by type of qualification for ACG	ients by ty	pe of qua	ification fo	or ACG	ACG	Perci ecipients	Percentage distribution of ACG recipients by type of qualification for ACG	stribution f qualifica	of tion for A	90
	of Pell Grant	second- year Pell		State						State desig-	-	-		
State of	students	Grant	State	desig-		(Out-of-	-	State	nated			Out-ot-	=
student's residence	with ACGs \	with students ACGs with ACGs	Scholars Initiative	nated program	Courses	AP or IB p	state program	Un- known	Scholars Initiative	pro- gram C	Courses	AP or IB pr	state program	Un- known
Total	299,701	10.2	6,597	102,587	169,682	13,328	1,962	5,353	2.2	34.2	9.99	4.	0.7	4.8
Maine	2,033	17.1		571	1,339	78	13	32		28.1	62.9	3.8	9.0	1.6
Pennsylvania	15,974	15.9	I	1,706	13,302	888	45	33	I	10.7	83.3	5.6	0.3	0.2
Massachusetts	6,772	15.9	315	2,278	3,856	266	17	40	4.7	33.6	56.9	3.9	0.3	9.0
Nebraska	3,065	15.8	100		2,925	6	15	16	3.3	I	95.4	0.3	0.5	0.5
Vermont	759	15.3	I		654	49	27	59	I	I	86.2	6.5	3.6	3.8
North Dakota	1,039	15.2	I	863	142	9	22	က		83.1	13.7	9.0	2.4	0.3
South Dakota	1,232	14.5	I	1	1,141	7	17	63		I	97.6	6.0	1 .	5.1
New Hampshire	1,052	14.0	I	4	867	103	25	16		3.9	82.4	8.6	2.4	1.5
Louisiana	6,322	13.9	788	4,037	1,404	28	29	9	12.5	63.9	22.2	0.4	6.0	0.1
Wisconsin	6,126	12.9	I	1,641	4,217	191	69	∞		26.8	8.89	3.1	[0.1
New Jersey	8,146	12.4	974		6,521	379	109	163	12.0	I	80.1	4.7	1.3	2.0
New York	24,217	12.1	I	4,564	17,860	1,583	96	114		18.8	73.7	6.5	9.0	0.5
Minnesota	5,585	11.6	I	2,525	2,878	133	59	20		45.2	51.5	2.4	0.5	0.4
Oklahoma	4,330	11.3	95	2,617	1,564	40	4	က	2.1	60.4	36.1	6.0	0.3	0.1
Texas	28,715	11.2	I	22,961	4,606	934	177	37		80.0	16.0	3.3	9.0	0.1
Montana	1,119	1.1	I	289	737	75	16	7		25.8	62.9	6.7	1 .	0.2
Ohio	14,297	10.9	I	992	12,931	285	69	246	l	5.4	90.4	2.0	0.5	1.7
North Carolina	10,342	10.9	189	4,795	4,367	952	32	7	1.8	46.4	42.2	9.2	0.3	0.1
District of Columbia	406	10.7	I	l	328	45	20	13		I	80.8	1.1	4.9	3.2
Indiana	7,564	10.7	176	6,312	286	28	26	2	2.3	83.4	13.0	8.0	0.3	0.1
Kansas	2,776	10.6	I	846	1,805	28	40	27		30.5	65.0	2.1	1 .	1.0
Iowa	3,585	10.5		262	2,737	48	4	524	I	7.3	76.3	1.3	0.4	14.6

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Number and percentage of Pell Grant recipients who also received an ACG and the number and percentage distribution of ACG recipients by type of qualification, by state of student's residence: 2006–07—Continued Table 8.

		Percent												
	Total	of first-								Perc	entage di	Percentage distribution of	of	
	number	and	Number of	er of ACG recipients by type of qualification for ACG	ients by ty	pe of qualif	ication fc	or ACG	ACG r	ecipients	by type o	ACG recipients by type of qualification for ACG	ion for A	ე <u>ც</u>
	of Pell	-puooes								State				
	Grant	year Pell		State						desig-				
State of	students	Grant	State	desig-		J	Out-of-		State	nated		_	Out-of-	
student's	with	students	Scholars	nated		ЧΡ	state	'n	Scholars	pro-		AP	state	'n
residence	ACGs	ACGs with ACGs	Initiative	program (Courses	or IB pro	program	known	Initiative	gram C	Courses	or IB pr	program	known
South Carolina	5,203	10.4	l	1,908	3,154	109	23	တ		36.7	9.09	2.1	9.0	0.2
Rhode Island	803	10.2	23	I	292	56	12	175	2.9	I	9.02	3.2	1.5	21.8
Idaho	1,543	10.1	I	699	776	26	17	7	I	43.4	50.3	5.1	[-	0.1
Connecticut	2,235	10.1	193	24	1,780	189	31	18	9.8	<u></u>	9.62	8.5	1 .	0.8
Georgia	9,431	6.6	I	2,347	6,056	947	75	9	I	24.9	64.2	10.0	0.8	0.1
Virginia	5,414	6.6	213	2,540	2,364	235	46	16	3.9	46.9	43.7	4.3	0.8	0.3
Tennessee	5,921	6.6	1,285	1,670	2,757	06	43	9/	21.7	28.2	46.6	1.5	0.7	ر ن
Arkansas	3,883	9.8	502	1,376	1,932	52	40	∞	12.9	35.4	49.8	9.0	1.0	0.2
California	29,877	9.7	I	20,395	8,005	1,390	22	30	I	68.3	26.8	4.7	0.2	0.1
Maryland	3,816	6.7	260	I	3,301	202	39	1	8.9		86.5	5.3	1.0	4.0
Florida	15,106	9.3	I	7,416	7,213	334	82	61	I	49.1	47.7	2.2	0.5	4.0
West Virginia	1,660	9.1	87	726	774	28	15	l	5.2	43.7	46.6	3.5	6.0	
Wyoming	360	8.9	I	46	299	7	က	-	I	12.8	83.1	3.1	0.8	0.3
Missouri	5,034	8.8		1,638	3,280	75	78	16	I	32.5	65.2	1 .	9.0	0.3
Hawaii	615	8.8		4	512	39	16	7	I	6.7	83.3	6.3	5.6	<u></u>
Kentucky	4,646	8.8	70	899	3,800	74	59	2	7.	14.4	81.8	1.6	9.0	0.1
Nevada	663	8.5		131	480	8	15	က	I	19.8	72.4	5.1	2.3	0.5
Colorado	3,101	8.5	22	571	2,196	249	23	2	<u></u>	18.4	70.8	8.0	0.7	0.2
Illinois	10,135	8.5	I	I	8,629	763	103	640	I		85.1	7.5	1.0	6.3
Oregon	2,340	7.4	I	I	2,111	131	27	71	I		90.2	5.6	1.2	3.0
Washington	3,356	7.1	34	1,680	1,395	202	22	17	1.0	50.1	41.6	6.1	0.7	0.5
Mississippi	3,439	8.9	784	22	2,566	3	27	တ	22.8	9.0	74.6	6.0	0.8	0.3
Alabama	3,357	9.9		1,251	1,929	140	34	က	I	37.3	57.5	4.2	1.0	0.1
Delaware	383	6.1	I	62	271	39	9	2	I	16.2	70.8	10.2	1.6	1.3
														I

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Number and percentage of Pell Grant recipients who also received an ACG and the number and percentage distribution of ACG recipients by type of qualification, by state of student's residence: 2006-07-Continued Table 8.

	Total	Percent of first-								Perc	entage dis	Percentage distribution of	of	
	number	and		Number of ACG recipients by type of qualification for ACG	ients by tyl	oe of quali	fication for	or ACG	ACG r	ecipients	by type o	ACG recipients by type of qualification for ACG	tion for A	CG
	of Pell	second-								State				
	Grant	year Pell		State						desig-				
State of	students	Grant	State	desig-			Out-of-		State	nated			Out-of-	
student's	with	students	Scholars	nated		AP	state	'n	Scholars	bro-		ΑЬ	state	'n
residence	ACGs v	ACGs with ACGs	Initiative	program Courses	Courses	or IB p	or IB program	known	Initiative	gram Courses	ourses	or IB	program	known
Michigan	6,164	5.1	286	158	5,158	493	34	35	4.6	2.6	83.7	8.0	9.0	9.0
New Mexico	1,076	4.2	47	I	962	44	4	6	4.4	l	89.4	4.1	1.3	0.8
Alaska	126	3.3	l	I	93	17	10	9	I	I	73.8	13.5	7.9	4.8
Utah	689	3.2	32	143	351	145	15	3	4.6	20.8	6.03	21.0	2.2	0.4
Arizona	1,383	2.9	06	31	1,161	82	15	4	6.5	2.2	83.9	5.9	- -	0.3
Puerto Rico	11,574	11.8			8,127	765	7	2,675	I	I	70.2	9.9	0.1	23.1
All others	912	9.5	I	I	626	100	167	19	1	1	9.89	11.0	18.3	2.1

— Not applicable.

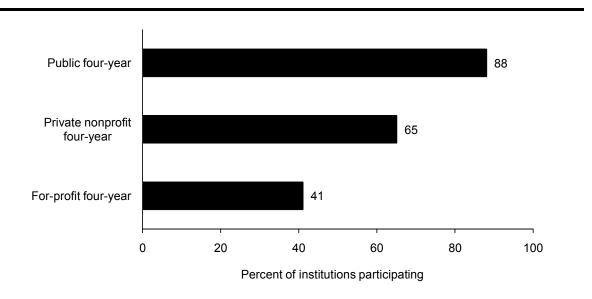
class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level. Detail may not sum NOTE: This table is based on unduplicated records. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported to totals because of rounding. SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

National SMART Grant Program

In 2006–07, about 1,400 institutions participated in the National SMART Grant program, and 62,000 students received a National SMART Grant.

The requirements for participation in the National SMART Grant program less stringent than for the ACG program. The institution must be eligible for participation in the Pell Grant program and offer bachelor's degrees in one of the designated science, mathematics, engineering, technology, or critical language fields. The U.S. Department of Education identified about 2,100 institutions that were potentially eligible, and 1,425 participated in the first year of the program by awarding at least one National SMART Grant. The institutional rates of participation were 88 percent at public four-year, 65 percent at private nonprofit four-year, and 41 percent at for-profit four-year institutions (Figure 16). The participating institutions enrolled about 2.5 million Pell Grant students, or nearly 90 percent of the total 2.8 million Pell Grant students at all National SMART Grant-eligible institutions. Additional details about institutional participation are provided in Appendix Table E-1.

Figure 16. Percentage of eligible institutions participating in the SMART Grant program, by type of institution: 2006–07



SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Of the 62,000 students who received a National SMART Grant, 42,000 were enrolled in public four-year institutions, 16,000 in private nonprofit four-year institutions, and 4,000 in for-profit

four-year institutions. Because eligibility was restricted to a small number of fields of study, only a little more than 5 percent of third- and fourth-year Pell Grant students at participating institutions received a National SMART Grant (Figure 17). Additional details about the number of recipients are presented in Appendix Table E-2.

Percent of Pell **Grant recipients** 50 40 30 20 10 6 5 5 5 5 5 5 5 0 Third-year Total third- and fourth-year Fourth-year Class level ■For-profit four-year ■Public four-year ■Private nonprofit four-year

Figure 17. Percentage of Pell Grant recipients who also received SMART Grants by class level, by type of participating institution: 2006–07

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

About 60 percent of National SMART Grant students received the maximum \$4,000 award, and about 30 percent received one-half or two-thirds of the maximum award.

National SMART Grants, ACGs, and Pell Grants are disbursed to students on a term-by-term basis. Students who were awarded National SMART Grants at colleges with semester calendars received \$2,000 for each semester enrolled as a third- or fourth-year student; those in colleges with trimesters received one-third of the award (\$1,333) for each trimester. About 60 percent of the National SMART Grant students received the full-year award of \$4,000; about one-fourth received one-half (\$2,000), and about 7 percent received one-third or two-thirds (\$1,333 or \$2,667) (Figure 18). Seven percent received some other amount, including those who were enrolled in colleges with nontraditional calendars (primarily for-profit institutions). In addition, some of the students with other amounts may have had their National SMART Grant award

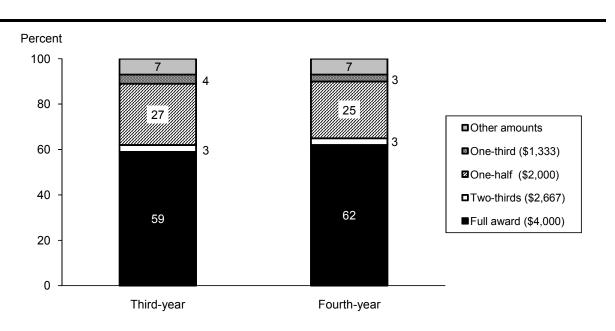


Figure 18. Percentage distribution of third- and fourth-year SMART Grant recipients by amount received: 2006–07

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

reduced because it exceeded their need. About 3 percent of the National SMART Grant recipients (1,700 students) had received one-half of an ACG in the first semester (as a second-year student) and then one-half of a National SMART Grant in the second semester (as a third-year student). About 7 percent (4,600 students) who received National SMART Grants were third-year students in the first semester and then became fourth-year students in the second semester. These students would only be eligible for one-half of a National SMART Grant in the next year, because they had already received one-half of the award as a fourth-year student.

There was a wide range in the number of grants awarded at institutions, but more than one-third of institutions awarded 10 or fewer National SMART Grants.

The average number of National SMART Grants awarded was 80 at public four-year colleges, 20 at private nonprofit four-year colleges, and 50 at for-profit four-year colleges (Appendix Table E-3). A large majority of institutions awarded 50 or fewer National SMART Grants: 38 percent awarded 10 or fewer, and 42 percent awarded between 11 and 50 (Figure 19).

About one-fourth of the public four-year institutions awarded over 100 National SMART Grants, but 90 percent of the private nonprofit four-year and for-profit four-year institutions awarded 50 or fewer (Appendix Tables E-4 and E-5).

Percent 50 42 38 40 30 20 10 10 6 3 0 1-10 11-50 51-100 101-200 201-500 More than 500 Number of SMART Grant recipients

Figure 19. Percentage distribution of institutions participating in the SMART Grant Program by the number of SMART Grant recipients: 2006–07

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interf

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

The distribution of awards by class level was relatively even.

As indicated earlier, there was no major difference in National SMART Grant participation by class level, with about 5 percent of students participating in both years (Figure 17). From a different perspective, 40 percent of the National SMART Grant awards went to third-year students, 7 percent to students who were in both the third and fourth year at different times in 2006–07, and 52 percent to fourth-year students (Figure 20). Additional details on participation by class level and type of institution are shown in Appendix Table E-7.

Nearly 60 percent of the National SMART Grant recipients were men.

Although the majority of students in the Pell Grant program are women, more men than women received National SMART Grants in 2006–07 (Figure 21), reflecting the predominance of men in eligible fields. Over the past decade, women have gained ground in some, but not all, of these fields. For example, between 1995–96 and 2005–06, the percentage of bachelor's degrees awarded to women increased in physical sciences or science technologies (from 36 to 42 percent) and in biological or biomedical sciences (from 53 to 62 percent) (Planty et al. 2008, Indicator 27). At the same time, between these two years, the percentage of degrees awarded to women remained stable in mathematics and statistics (46 and 45 percent, respectively) and engineering or engineering technologies (16 and 18 percent, respectively) and declined in computer or

information sciences (from 28 to 21 percent). Appendix Table E-8 presents more details on the demographic characteristics of National SMART Grant recipients.

Percent

100

80

60

40

Third-year

Fourth-year

Both levels (different terms)

Class level

Figure 20. Percentage distribution of SMART Grant recipients by class level: 2006-07

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

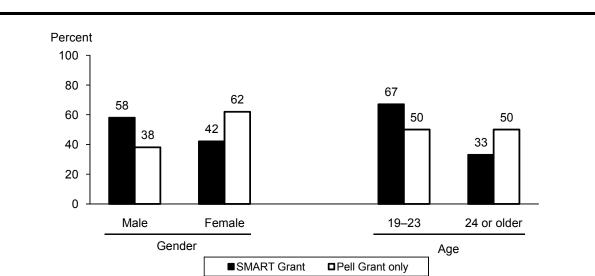


Figure 21. Of SMART Grant recipients and third- and fourth-year students who received only Pell Grants at SMART Grant-participating institutions, percentage distributions by gender and age: 2006–07

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

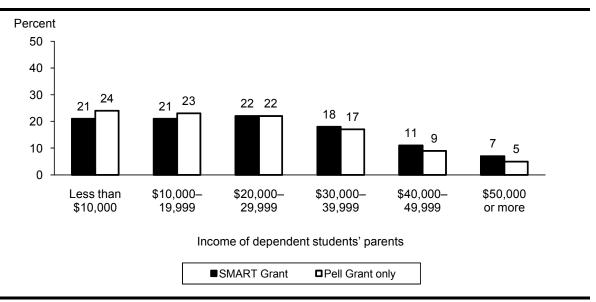
One-third of the National SMART Grant recipients were age 24 or older, and about 40 percent were independent students.

National SMART Grant recipients were younger than third- and fourth-year students who received only Pell Grants. Although one-third of the National SMART Grant recipients were age 24 or older, one-half of the students who received only Pell Grants were that age (Figure 21 and Appendix Table E-8). About 60 percent of the National SMART Grant recipients were still dependent students, compared with about 40 percent of the third- and fourth-year Pell Grant students who did not receive National SMART Grants (Appendix Table E-9).

The family income of dependent students who received National SMART Grants was slightly higher than that of their peers who received only Pell Grants.

The income difference was not as great as among ACG recipients. Eighteen percent of the dependent National SMART Grant recipients came from families with incomes of \$40,000 or more, compared with 14 percent of third- and fourth-year students who received only Pell Grants (Figure 22 and Appendix Table E-9). At the same time, 21 percent of dependent National SMART Grant recipients came from families with incomes under \$10,000, compared with 24 percent of students with only Pell Grants. The incomes of independent students were not

Figure 22. Of dependent SMART Grant recipients and dependent third- and fourth-year students who received only Pell Grants at SMART Grant-participating institutions, percentage distribution by parents' income: 2006–07



NOTE: Detail may not sum to totals because of rounding.

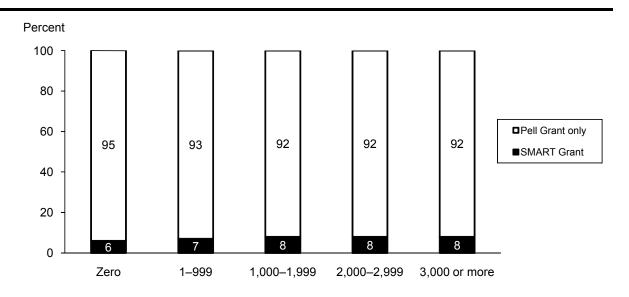
SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

provided in the data file, but they are usually very low compared with the parental incomes of dependent students.⁴⁴

The federal Expected Family Contribution (EFC) is a measure of the student's ability to pay for college and is used to determine the Pell Grant amount. Students with a zero EFC are the neediest, and are therefore eligible for the maximum Pell Grant award. Among dependent third-and fourth-year Pell Grant recipients, the percentage of students who also received a National SMART Grant was directly related to their EFC level. Among students with a zero EFC, 6 percent received a National SMART Grant, compared with 8 percent of dependent students with an EFC of 1,000 or more (Figure 23). The relationship between EFC and National SMART Grant receipt is not as strong among independent students: 3.4 percent of Pell Grant students with a zero EFC received a National SMART Grant, compared with 3.6 percent of those with an EFC of 3,000 or more (Appendix Table E-10).

⁴⁴ Full-time independent students tend to have lower incomes than their dependent counterparts in part because they are enrolled full-time. Among full-time students in 2003–04, 85 percent of independent students had incomes of less than \$50,000, while 39 percent of dependent students came from families with incomes less than \$50,000 (U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study [NPSAS:04], Data Analysis System).

Figure 23. Of all dependent third- and fourth-year students receiving Pell Grants at SMART Grantparticipating institutions, percentage distribution by whether they received a SMART Grant, by Expected Family Contribution (EFC): 2006–07



Dependent student EFC

NOTE: The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. The EFC is used as an index number and is used to determine the Pell Grant amount. The average family incomes corresponding to these EFC categories were \$9,700, \$19,700, \$31,000, \$36,000, and \$39,900. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

There was little variation in the average National SMART Grant among dependent students at different EFC levels, although students with zero EFCs received the largest share of grant dollars.

The average National SMART Grant among dependent students was about \$3,300 regardless of EFC level (Figure 24 and Appendix Table E-11). However, the average combined Pell Grant and National SMART Grant declined as EFC increased. Students with a zero EFC received an average combined Pell and National SMART Grant of \$7,100. Students at the higher end of the EFC range received a relatively small average Pell Grant (\$631), but an average National SMART Grant of \$3,300. Students with a zero EFC received the largest share of National SMART Grant dollars (28 percent) (Figure 25 and Appendix Table E-12). They also received one-third of the combined ACG and Pell Grant dollars.

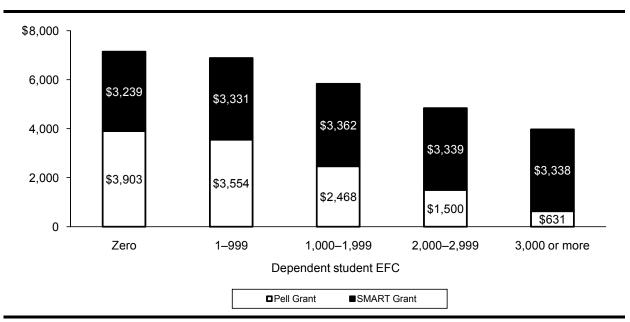


Figure 24. Average Pell and SMART Grant amounts awarded to dependent third- and fourth-year students with SMART Grants, by Expected Family Contribution (EFC): 2006–07

NOTE: The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. The EFC is used as an index number and is used to determine the Pell Grant amount. The average family incomes corresponding to these EFC categories were \$9,700, \$19,700, \$31,000, \$36,000, and \$39,900. SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Life science was the most common major of National SMART Grant recipients; very few majored in a critical language.

The distribution of all National SMART Grant recipients by field of study is displayed in Figure 26. The largest proportion of National SMART Grant students majored in the life sciences (38 percent), followed by engineering (21 percent), computer science (16 percent), physical sciences (10 percent), mathematics (7 percent), technology (5 percent), multidisciplinary studies (3 percent), and critical foreign languages (1 percent). See Appendix Table E-13 for details.

Percent 50 40 32 28 30 17 16 16 20 15 13 10 0 Zero 1-999 1,000-1,999 2,000-2,999 3,000 or more Dependent student EFC ■Pell Grant dollars ■SMART Grant dollars ■Combined dollars

Figure 25. Percentage distribution of Pell Grant and SMART Grant dollars for dependent third- and fourth-year students, by Expected Family Contribution (EFC): 2006–07

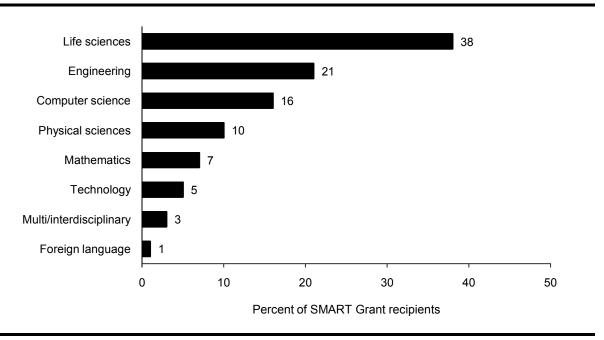
NOTE: The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. The EFC is used as an index number and is used to determine the Pell Grant amount. The average family incomes corresponding to these EFC categories were \$9,700, \$19,700, \$31,000, \$36,000, and \$39,900. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Public four-year institutions awarded the largest number of National SMART Grants, concentrated in the life sciences and engineering.

The largest concentrations of National SMART Grants were awarded in the life sciences and in engineering at public four-year institutions (17,100 and 10,100, respectively) (Figure 27 and Appendix Table E-13). About two-thirds of all the National SMART Grants were awarded to students in public four-year institutions, about one-quarter to students in private nonprofit four-year institutions, and only 6 percent to students in for-profit four-year institutions.

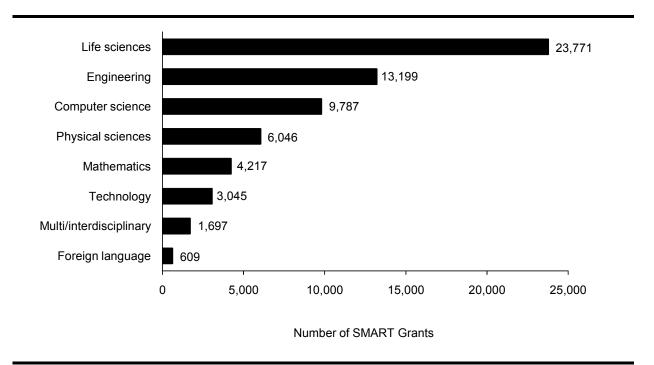
Figure 26. Percentage distribution of SMART Grant recipients by field of study: 2006-07



NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Figure 27. Number of SMART Grants, by field of study: 2006-07



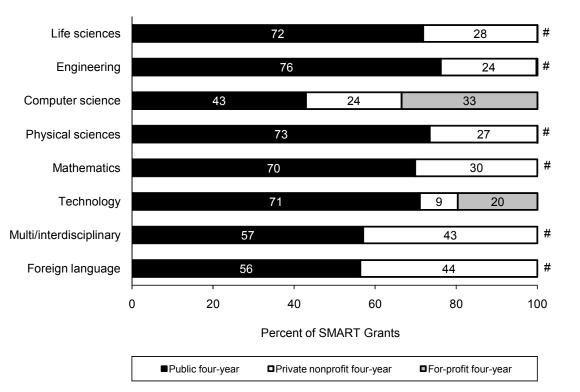
SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Public four-year institutions awarded 70 percent or more of the National SMART Grants in all of the science, technology, engineering, and mathematics (STEM) fields except computer science (Figure 28 and Appendix Table E-13). Private nonprofit four-year institutions awarded more than 40 percent of the National SMART Grants in foreign languages and multidisciplinary studies.

Nearly all the National SMART Grants at for-profit institutions were in computer science or technology, and for-profit institutions awarded one-third of all National SMART Grants in computer science.

For-profit four-year institutions awarded about 3,300 National SMART Grants in computer science and 600 National SMART Grants in technology. These two fields accounted for 99 percent of the National SMART Grants awarded at for-profit institutions (Appendix Table E-13). One-third of the National SMART Grants in computer science were awarded at for-profit institutions (Figure 28).

Figure 28. Percentage distribution of SMART Grants by type of institution within field of study: 2006–07



[#] Rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Participation rates varied widely by state, with no obvious patterns.

The percentage of third- and fourth-year Pell Grant students who also received National SMART Grants ranged from 14 percent at participating institutions in Utah to 2 percent at participating institutions in the District of Columbia. Table 9 shows how states rank by the percentage of third- and fourth-year Pell Grant students who also received a National SMART Grant at participating institutions in that state. It also shows the percentage of bachelor's degrees awarded in National SMART Grant-eligible fields by the institutions in that state. There does not appear to be a direct relationship between the National SMART Grant participation rate at institutions in a state and the percentage of bachelor's degrees awarded in National SMART Grant-eligible fields by institutions in that state. The observed variation by state could reflect different levels of diligence in administering the program, but differing proportions of students meeting the other eligibility requirements—full-time attendance, U.S. citizenship, and maintaining a cumulative GPA of 3.0—could also contribute.

Table 9. Number of third- and fourth-year students with Pell Grants, number with SMART Grants, percentage of Pell Grant recipients who also received a SMART Grant, and percentage of all bachelor's degrees awarded in SMART Grant-eligible fields, by state of institution attended: 2006–07

	Number of third-	Number of	Percent of third-	Percent of
	and fourth-year	Pell Grant	and fourth-year	bachelor's degrees
State of	students	recipients with	Pell Grant recipients	awarded in SMART
institution attended	with Pell Grants	SMART Grants	with SMART Grants	Grant-eligible fields
institution attenued	with Fell Grants	SWART GIAIRS	WILLI SIVIART GIALLS	Grant-eligible fields
Total	1,208,054	62,371	5.2	15.8
Utah	24,060	3,392	14.1	17.0 *
Idaho	11,681	1,075	9.2	15.2
Washington	18,327	1,541	8.4	16.2 *
Oregon	14,708	1,088	7.4	16.9 *
New Hampshire	2,642	194	7.3	13.7
Massachusetts	18,614	1,328	7.1	16.1 *
North Dakota	4,332	309	7.1	15.7
Montana	5,476	381	7.0	20.0 *
Colorado	19,543	1,317	6.7	20.9 *
South Dakota	5,463	333	6.1	21.1 *
Pennsylvania	45,723	2,758	6.0	17.2 *
Minnesota	17,631	1,050	6.0	15.6
Wisconsin	19,175	1,120	5.8	16.4 *
California	127,465	6,854	5.4	17.4 *
Wyoming	1,481	79	5.3	23.0 *
Illinois	49,754	2,635	5.3	16.1 *
Vermont	2,668	141	5.3	13.5
Arizona	44,073	2,328	5.3	16.6 *
Nevada	3,989	201	5.0	12.6
Florida	51,095	2,539	5.0	12.9
Michigan	40,640	1,997	4.9	17.4 *
Oklahoma	19,152	940	4.9	14.7
Kansas	14,051	683	4.9	14.6
Connecticut	5,933	286	4.8	11.8
West Virginia	9,788	467	4.8	13.8
Indiana	24,477	1,158	4.7	16.2 *
New York	86,421	4,040	4.7	14.1
New Mexico	10,473	486	4.6	16.6 *
Hawaii	3,946	182	4.6	13.5
Missouri	25,180	1,130	4.5	14.4
Georgia	33,975	1,521	4.5	17.1 *
Virginia	21,317	952	4.5	16.1 *
South Carolina	15,654	696	4.4	15.1
Nebraska	7,768	345	4.4	13.2
Kentucky	18,065	795	4.4	12.5
Alabama	22,082	971	4.4	15.9 *
Maryland	12,945	564	4.4	20.8 *
Ohio	41,952	1,820	4.3	14.1
lowa	18,735	809	4.3	14.6
Tennessee	23,717	1,016	4.3	12.9

Cont'd. next page. See notes at end of table.

Table 9. Number of third- and fourth-year students with Pell Grants, number with SMART Grants, percentage of Pell Grant recipients who also received a SMART Grant, and percentage of all bachelor's degrees awarded in SMART Grant-eligible fields, by state of institution attended: 2006–07—Continued

	Number of third-	Number of	Percent of third-	Percent of
	and fourth-year	Pell Grant	and fourth-year	bachelor's degrees
State of	students	recipients with	Pell Grant recipients	awarded in SMART
institution attended	with Pell Grants	SMART Grants	with SMART Grants	Grant-eligible fields
Louisiana	21,729	916	4.2	16.8 *
Maine	5,480	227	4.1	16.6 *
North Carolina	31,939	1,307	4.1	16.8 *
New Jersey	20,321	785	3.9	15.9 *
Alaska	1,636	60	3.7	20.0 *
Texas	80,803	2,933	3.6	15.1
Rhode Island	4,773	172	3.6	13.5
Arkansas	13,850	480	3.5	13.4
Mississippi	17,707	538	3.0	15.1
Delaware	1,826	53	2.9	12.2
District of Columbia	6,360	122	1.9	16.4 *
Puerto Rico	56,978	3,254	5.7	
Guam	481	3	0.6	

^{*} Indicates higher than total percentage of bachelor's degrees awarded in SMART Grant-eligible fields.

NOTE: This table includes duplicate records for students who received grants at more than one college in 2006–07. Class level is institution-reported for ACGs and SMART Grants but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level but included in the totals.

SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept, 21, 2007).

CHAPTER 5

Baseline Information

In addition to collecting information on implementation problems and analyzing first-year participation data, the authors of this study examined trends in high school course-taking and used historical data to develop estimates of the numbers of students who would have been eligible for the grants at various points in time (had the programs existed at the time). As this study continues, this baseline information will provide a context within which to interpret data on current and future participation in the Academic Competitiveness Grant (ACG) and National Science and Mathematics Access to Retain Talent (National SMART) Grant programs.

Trends in High School Course-taking

Because a key objective of the ACG program is to motivate high school students to take rigorous courses, information on trends in high school course-taking provides important contextual information for interpreting changes over time. For example, if high school students are taking increasingly rigorous courses over time, this will have to be factored in to estimate the effects of any increase attributable to the ACG program.

Because the ACG and National SMART Grant programs were implemented in 2006–07, none of the surveys or data collections conducted to date by the National Center for Education Statistics (NCES) include recipients. Nevertheless, two national studies can be used to help develop baseline estimates of the percentages of students who complete a rigorous high school curriculum, how these estimates have changed over time, and how completion of a rigorous curriculum varies with family income. These are the High School Transcript Studies (HSTS), which are conducted periodically (most recently in 2005) as part of the National Assessment of Educational Progress (NAEP), and the Education Longitudinal Study (ELS), which includes transcripts for a nationally representative sample of students who graduated from high school in 2004. The HSTS allow tracking of course-taking over time (but not reliably by income 46), while ELS provides the opportunity to examine course-taking by family income (but not over time).

⁴⁵ The 2007–08 National Postsecondary Student Aid Study (NPSAS), based on a nationally representative sample of all postsecondary students, will include questions on knowledge of and participation in the ACG and National SMART Grant programs. These data will be available in 2009.

⁴⁶ While NAEP routinely collects information on school lunch eligibility and uses it as an indicator of poverty for elementary school children, it does not normally report this information for 12th-graders. High school students participate in the school lunch program at a much lower rate than students in elementary school, leading to an unknown poverty status for a large number of students.

The percentage of high school graduates completing a rigorous curriculum has increased over time, and about half of all high school graduates now complete the ED course-based high school curriculum.

The percentage of high school graduates meeting all the requirements of the ED course-based curriculum increased from 32 percent in 1990 to 48 percent in 2000 and 54 percent in 2005 (Figure 29). The percentage completing four years of English and three years of social studies has always been high: 85 percent or more in each of the three years. The percentages meeting the ED-specified course work in mathematics, science, and a language other than English have increased notably, however, especially between 1990 and 2000. In each of the three years, the science requirement (taking two courses from biology, chemistry, or physics) appeared to be the most difficult to meet.

A relatively small—but increasing—percentage of high school graduates are completing the more difficult State Scholars Initiative course requirements: 4 percent in 1990, 11 percent in 2000, and 15 percent in 2005. Students were least likely to meet the social studies requirement (41 percent), which is very specific compared with the ED course-based curriculum, and the science requirement (43 percent), which requires all three of the major laboratory science courses (biology, chemistry, and physics).

Participation in AP and IB courses is increasing. According to the NAEP transcripts, 10 percent of high school graduates in 2000 and 18 percent in 2005 completed at least two such courses.⁴⁷ However, their scores are unknown, making it impossible to estimate how many would have been eligible for an ACG on this basis, which requires a score of 3 or higher (out of 5) for AP courses and 4 or higher (out of 7) for IB courses.

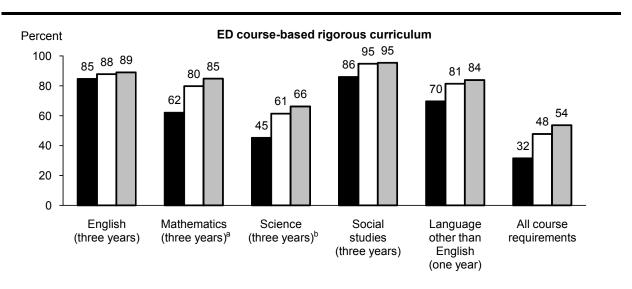
Low-income high school graduates tend to be less well-prepared academically than their higher-income peers.

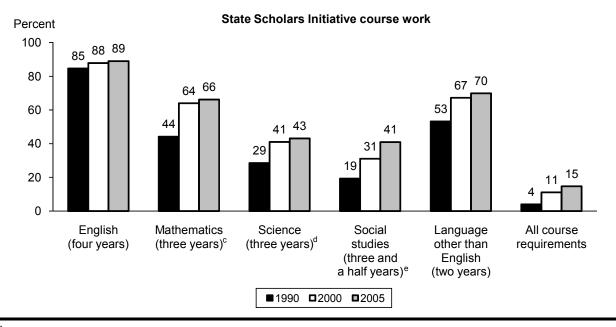
The ELS transcripts indicate that, overall, 44 percent of all 2004 high school graduates completed the ED course-based curriculum (lower than the 54 percent shown in the 2005 HSTS) (Appendix Table F-1). No reasons have been determined other than that the studies were a year apart and both are sample surveys, but NCES-published reports indicate differences in the same direction as well.⁴⁸

⁴⁷ U.S. Department of Education, National Center for Education Statistics, High School Transcript Studies, 2000 and 2005. Not shown in table.

⁴⁸ The reports (Planty, Bozick, and Ingels 2006; Shettle et al. 2007) show differences in average total credits, average mathematics credits, average science credits, average social studies credits, and average foreign language credits, with the results from HSTS always being a bit higher. There was no difference in average English credits. The reports define mathematics course-taking differently, making it impossible to compare levels of mathematics course-taking.

Figure 29. Percentage of *all* high school graduates completing a rigorous high school program in various subject areas: 1990, 2000, and 2005





^a Including algebra I and a higher-level course.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Transcript Studies, 1990, 2000, and 2005.

^b Including at least two courses from biology, chemistry, or physics.

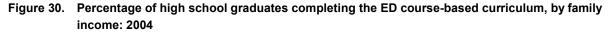
^c Algebra I, algebra II, and geometry.

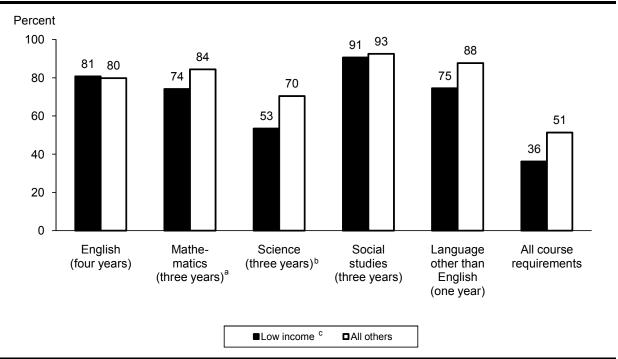
^d Biology, chemistry, and physics.

^e U.S. and world history, world geography, economics, and government.

For this analysis, the same programming code was used to determine whether the students met the various requirements, so that is not a source of the difference.⁴⁹

Among all high school graduates, low-income graduates (those from families with annual incomes of \$50,000⁵⁰ or less) were considerably less likely than their higher-income peers to complete the full ED course-based curriculum in 2004 (36 vs. 51 percent) (Figure 30). They were also less likely than their higher-income peers to complete the required course work in mathematics and science, but not in English or social studies. Unfortunately, it is not possible with these data to determine to what extent these differences are related to student interest and preparation versus course availability at their high schools.





^a Including algebra I and a higher-level course.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002/2004), "First Follow-up, High School Transcript Study, 2004."

^b At least two courses from biology, chemistry, or physics.

^c \$50,000 or less annual family income in 2001.

⁴⁹ No nationally representative data exist on course offerings, but the percentage of schools offering AP courses varies with school size, urbanicity, and region (Waits, Setzer, Lewis, and Greene 2005).

⁵⁰ The amount of \$50,000 was chosen as the upper limit to identify low-income graduates because families with incomes above \$50,000 are typically not eligible for Pell Grants.

Among high school graduates who entered college within a year of finishing high school, the income gap in completing all course requirements remained but was less pronounced.

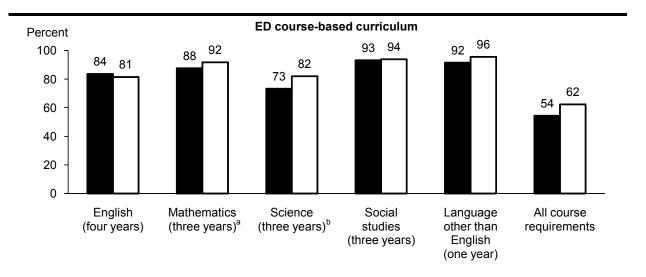
Among this group, 54 percent of low-income students had completed the ED course-based curriculum, compared with 62 percent of their higher-income counterparts (Figure 31). In most subjects, the differences were relatively small, but just 73 percent of the low-income graduates had met the science requirement, compared with 82 percent of higher-income graduates. Low-income high school graduates who enrolled full-time in community colleges were much less likely than their counterparts at four-year colleges to have completed the rigorous curriculum (39 vs. 63 percent) (Appendix Table F-1). Again, it is not possible with these data to determine to what extent these differences are related to student interest and preparation versus course availability at their high schools.

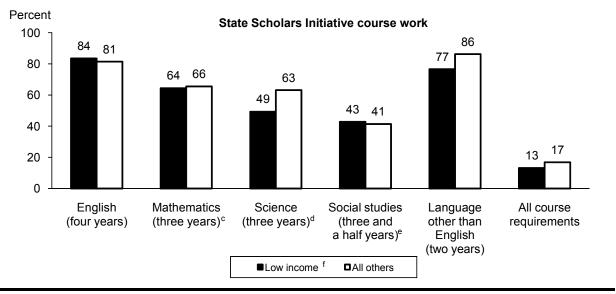
If the SSI requirements were the standard for ACG eligibility, only 13 percent of all low-income high school graduates who enrolled in college full-time would qualify (Figure 31). Again, the most notable income gap was in science. As with the ED course-based curriculum, low-income high school graduates who enrolled full-time in community colleges were much less likely than their counterparts at four-year colleges to have completed the rigorous curriculum (7 vs. 17 percent) (Appendix Table F-2).

ELS transcripts indicate whether students took AP or IB courses, although they do not show their scores. Among graduates who enrolled full-time in postsecondary education within a year and whose family income was \$50,000 or less, 23 percent had completed at least two AP or IB courses, compared with 30 percent of their higher-income counterparts. The College Board (2008) also reports increases in the numbers of students taking AP exams. The percentage of public high schools offering AP courses is greater in suburban areas (87 percent) than in cities (77 percent), towns (72 percent), and rural areas (50 percent) (Waits et al. 2005), which suggests that higher-income students have more access to these courses.

⁵¹ U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), "High School Transcript Study, 2004." Not shown in table.

Figure 31. Among 2004 high school graduates who enrolled in college full-time within a year of high school graduation, percentage who had completed a rigorous high school program, by family income





^a Including algebra I and a higher-level course.

NOTE: Limited to high school graduates who entered postsecondary education within one year after completing high school and enrolled in a degree program full-time.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002/2004), "First Follow-up, High School Transcript Study, 2004."

^b At least two courses from biology, chemistry, or physics.

^c Algebra I, algebra II, and geometry

^d Biology, chemistry, and physics.

^e U.S. and world history, world geography, economics, and government.

f \$50,000 or less annual family income in 2001.

Estimates of Eligibility for ACGs and National SMART Grants

Information on the eligibility of students for ACGs and National SMART Grants informs two important questions related to implementation and program design:

- Are all eligible students actually receiving grants?
- What criteria are Pell Grant recipients not meeting? What are the greatest barriers to participation?

None of the NCES-sponsored postsecondary sample surveys is recent enough to include any ACG or National SMART Grant recipients. Nevertheless, data from two surveys—the National Postsecondary Student Aid Study (NPSAS) and its longitudinal component, the Beginning Postsecondary Students Longitudinal Study (BPS)—can be used to help address the questions posed above. In addition, NPSAS:08, currently in the data collection phase and expected to be released in 2009, will provide information on awards received and on students' knowledge of the ACG and National SMART Grant programs. Finally, the Integrated Postsecondary Education Data System (IPEDS) can be used to examine trends in the number of degrees awarded in National SMART Grant-eligible majors. A brief summary of these surveys is included in Appendix D. Additional details on sample size and survey methodology for all NCES surveys are available at: http://nces.ed.gov/surveys/. Actual participation of ACGs and National SMART Grants may differ from the eligibility estimates due to problems with the data used in the estimates as well as problems with implementation that may have caused eligible students not to receive awards.

ACGs

The BPS longitudinal studies conducted by NCES include representative samples of students who enrolled in postsecondary education for the first time in 1995–96 and 2003–04.⁵² The BPS data can be used to estimate how many of these students would have been eligible for an ACG if these grants had been in place when they enrolled—that is, how many recent high school graduates (those who graduated after January 1995 for the first cohort or 2003 for the second) enrolled in a degree program at a two- or four-year institution, were U.S. citizens, received Pell Grants, attended full-time, and completed approximations of the ED course-based high school curriculum.

BPS does not provide precise descriptions of students' course-taking, because high school transcripts were not collected for either cohort. However, students who took the SAT or ACT reported their course-taking when they took the tests, and this information was added to the BPS file. Students reported the number of courses they took in various subjects, but not the level. In

⁵² Follow-ups of the first cohort took place in 1998 and 2001 and of the second cohort in 2006; the 2003–04 cohort will be followed up again in 2009.

the estimates presented here, students were assumed to have completed the ED course-based curriculum if they completed four years of English, three years each of mathematics, science, and social studies, and one year of a language other than English, and to have completed the SSI curriculum if they completed these courses except two years (rather than one) of a language other than English.

These definitions are less restrictive than the actual ED course-based and SSI rigorous curricula because they do not take into account the specific courses or levels required in various subjects. As a result, estimates of ACG-eligible students derived from BPS criteria will be an overestimate of the actual number. However, the Education Longitudinal Study (ELS) transcript data (which do show course-taking levels) suggest that the BPS-generated estimate may not be too far off. As reported earlier, 54 percent of low-income 2004 high school graduates who enrolled in college full-time within a year had completed the ED course-based curriculum requirement (Figure 31). Using this same population, but considering only the number of courses in each subject (not the level) increases this estimate just 6 percentage points—to 60 percent. In other words, if low-income students who enrolled in college full-time immediately after high school had completed the requisite number of courses in the required subjects, they would have been very likely to achieve the levels needed to meet the ED course-based program.

Based on BPS, approximately 282,300 first-time, first-year students would have been eligible for an ACG in 2003–04 had the program existed, more than double the number who would have been eligible in 1995–96.

About 2.1 million beginning postsecondary students graduated from high school after January 2003 and enrolled in a degree program in 2003–04 (Table 10). Of these, 96 percent were citizens, 28 percent were also Pell Grant recipients, and 24 percent attended full-time as well, thus meeting the nonacademic requirements for an ACG (Figure 32). However, just 13 percent (or about 282,300) met these conditions *and* also completed the ED course-based curriculum, which would have made them eligible for an ACG if the program had existed at the time (Table 10). In other words, just over half of the first-year students who met the nonacademic requirements met the course-taking requirements as well.

The 13 percent who would have been eligible for an ACG in 2003–04 had the program existed then was almost twice as many as would have qualified in 1995–96 (7 percent). This increase represents the combined effect of greater percentages of beginning postsecondary students receiving Pell Grants, attending full-time, and completing a rigorous high school curriculum. The actual number who would have been eligible was more than twice as high (123,500 vs. 282,300)

⁵³ Also biasing the estimates upward may be the fact that not all students took the ACT or SAT, and those did are probably more likely than those who did not take them to have completed a rigorous high school program. ⁵⁴ U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), "High School Transcript Study, 2004." Not shown in table.

because the number of high school graduates enrolling in college right after high school also increased.

Table 10. Beginning postsecondary students who met various ACG requirements: 1995-96 and 2003-04

recent high school graduates in degree programs ^a	1995–96	2003-04
	4.050.000	0.400.000
Total number	1,656,200	2,129,800
Percent who:		
Were U.S. citizens	94.7	96.0
Received Pell Grants	22.8	29.2
Enrolled full-time	78.8	83.6
Completed the ED course-based high school curriculum ^b	48.5	60.0
Percent who:		
Were U.S. citizens	94.7	96.0
And received Pell Grants	20.4	27.5
And attended full-time	17.7	24.4
And completed the ED course-based curriculum	7.5	13.3
Number of potential ACG recipients	123,500	282,300

^a Excluded from this table are beginning postsecondary students who graduated from high school before January 1995 or January 2003 or who were in certificate or unknown programs.

Had the program existed in 2003–04, the largest numbers of ACGs would have been awarded to students at public four-year institutions and to students at moderately selective institutions, although the eligibility *rates* were not always higher at these two types of institutions than at others (Table 11). Students with a zero Expected Family Contribution (EFC)—that is, the lowest income students—were less likely to be eligible than those with higher EFCs (29 vs. 36 percent), suggesting that the lowest income students may be less likely to meet the course-taking requirements or enroll full-time. Compared with Pell Grant recipients overall, ACG-eligible students were more likely to be female and white and to attend four-year institutions and very or moderately selective institutions (Figure 33).

^b Refers to a high school curriculum that includes at least four years of English, three years each of mathematics, science, and social studies, and one year of a language other than English. The levels of these courses are unknown. This definition corresponds as closely as possible to the requirements under the ED course-based high school program, but because it does not take into account the level of the courses, these percentages will be overestimates. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996/01 and 2003/04 Beginning Postsecondary Students Longitudinal Studies (BPS:96/01 and BPS:03/04).

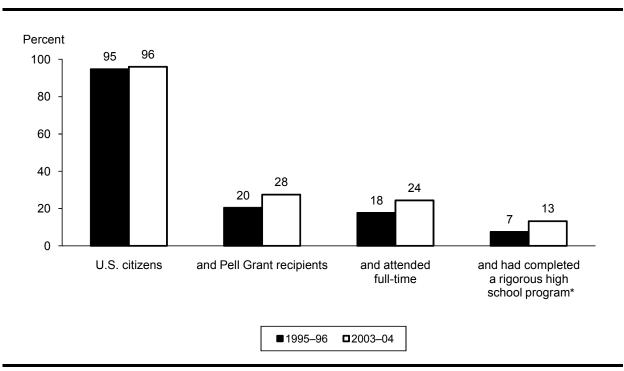


Figure 32. Among first-year students in degree programs who were recent high school graduates, percentage who would have met ACG requirements: 1995–96 and 2003–04

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996/01 and 2003/04 Beginning Postsecondary Students Longitudinal Studies (BPS:96/01 and BPS:03/04).

National SMART Grants

Conducted most recently in 2003–04, the NPSAS is conducted on a nationally representative sample of all postsecondary students. It can be used to estimate the number of third-year and higher students who would have met the eligibility requirements for a National SMART Grant had the program been in place at that time—that is, were U.S. citizens, received a Pell Grant, were enrolled full-time, had a GPA of 3.0 or higher, and were majoring in mathematics, science (physical, life, or computer), engineering, technology, or certain foreign languages considered critical to the national interest. The next NPSAS, being conducted in 2007–08, will ask students who have received ACGs and National SMART Grants about their knowledge of these programs.

^{*} Refers to a high school curriculum that includes at least four years of English, three years each of mathematics, science, and social studies, and one year of a language other than English. The levels of these courses are unknown. This definition corresponds as closely as possible to the requirements under the ED course-based high school program, but because it does not take into account the level of the courses, these percentages will be overestimates.

NOTE: Excluded from this table are beginning postsecondary students who graduated from high school before January 1995 or January 2003, respectively, or who were in certificate or unknown programs.

⁵⁵ The list of eligible fields is based on Classification of Instructional Program (CIP) codes, which is not how NPSAS majors were coded. However, the eligible CIP codes can be approximated from the NPSAS codes (see Appendix D for details on how this was done).

Table 11. Number of beginning postsecondary students in degree programs who were recent high school graduates, number of those who were Pell Grant recipients, and number and percentage who would have been eligible for ACGs, by selected student and institutional characteristics: 2003–04

	Number of recent high	Number	Number	Percent of total who	Percent of Pell Grant recipients
	school grad-	who were	who would	would	who would
	uates in degree	Pell Grant	have been	have been	have been
Characteristic	programs ^a	recipients	ACG-eligible ^b	ACG-eligible ^b	ACG-eligible ^b
Total	2,129,800	622,400	282,300	13.3	45.4
Gender					
Male	959,800	260,800	112,900	11.8	43.3
Female	1,170,000	361,600	169,400	14.5	46.8
Race/ethnicity					
White	1,431,400	294,000	153,100	10.7	52.1
Black	226,400	131,300	57,600	25.4	43.9
Hispanic	251,200	124,400	40,400	16.1	32.5
Asian/Pacific Islander	120,500	42,000	18,800	15.6	44.7
Other (including					
multiracial)	100,200	30,700	12,300	12.3	40.0
Family income (in 2002)					
Less than \$50,000	903,300	581,700	261,100	28.9	44.9
\$50,000 or higher	1,226,500	40,700	21,200	1.7	52.0
Expected family contribution					
Zero	321,300	235,700	94,000	29.3	39.9
Less than \$2,000	284,000	222,600	104,600	36.8	47.0
\$2,000–3,999	229,800	164,100	83,800	36.5	51.1
\$4,000 or higher	1,294,700	#	#	#	#
Type of institution					
Public four-year	864,900	226,400	134,000	15.5	59.2
Private not-for-profit					
four-year	445,000	121,700	72,400	16.3	59.5
Public two-year	707,300	196,300	57,400	8.1	29.2
Private for-profit	97,800	68,300	14,800	15.1	21.7
Other	14,800	9,600	3,700	25.0	38.6
Selectivity of institution					
Very selective	377,000	75,200	48,300	12.8	64.2
Moderately selective	739,100	200,500	126,500	17.1	63.1
Minimally selective	135,200	49,800	23,000	17.0	46.2
Open admission	58,600	22,600	8,600	14.7	38.1
Selectivity unclassified	819,800	274,300	76,000	9.3	27.7

Cont'd. next page. See notes at end of table.

Table 11. Number of beginning postsecondary students in degree programs who were recent high school graduates, number of those who were Pell Grant recipients, and number and percentage who would have been eligible for ACGs, by selected student and institutional characteristics: 2003–04

—Continued

Characteristic	Number of recent high school grad- uates in degree programs ^a	Number who were Pell Grant recipients	Number who would have been ACG-eligible ^b	Percent of total who would have been ACG-eligible ^b	Percent of Pell Grant recipients who would have been ACG-eligible ^b
Carnegie classification	of institution				
Doctoral	588,200	123,800	81,200	13.8	65.6
Master's	480,600	141,900	85,300	17.7	60.1
Baccalaureate	225,300	82,500	36,700	16.3	44.5
Associate's	757,500	237,100	66,300	8.8	28.0
Specialized	73,800	35,900	11,800	16.0	32.9
Other	4,300	1,300	1,200	27.6	91.5

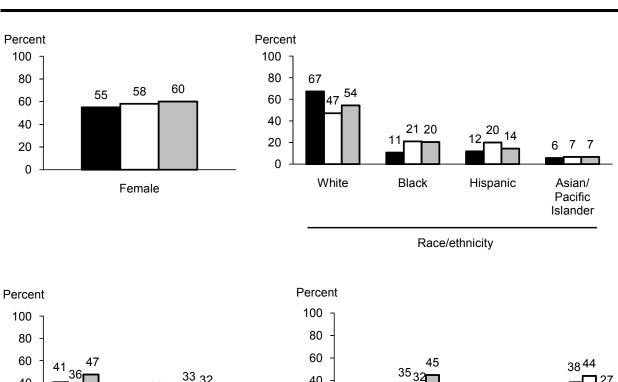
[#] Rounds to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003/04 Beginning Postsecondary Students Longitudinal Studies (BPS:03/04).

^a Graduated from high school in Jan. 2003 or later and enrolled in an associate or bachelor's degree program in 2003–04

^b Students who were U.S. citizens, received Pell Grants, enrolled full-time, and completed a rigorous high school curriculum, defined as at least four years of English, three years each of mathematics, science, and social science, and one year of a language other than English. Details on the content of these courses are not available. This definition corresponds as closely as possible to the requirements under the ED course-based high school program, but because it does not take into account the level of the courses, these numbers will be overestimates.

Figure 33. Of recent high school graduates enrolled in degree programs, percentage with selected student and institutional characteristics: 2003–04



35₃₂ 33 32 40 40 21 20 26 ¹⁸ ₁₂ ¹⁷ 20 688 20 11 5 3 4 3 0 Selec-Very Moder-Mini-Open **Public** Private **Public** Private selective ately mally admistivity not-forfour-year two-year for-profit selective selective sion unclasprofit sified four-year Type of institution Selectivity of institution ■All students ■All Pell Grant recipients ■ACG-eligible Pell Grant recipients

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996/01 and 2003/04 Beginning Postsecondary Students Longitudinal Studies (BPS:96/01 and BPS:03/04).

Based on NPSAS, approximately 80,600 third-year or above students would have been eligible for National SMART Grants in 2003–04, up from 69,600 in 1995–96.

Of the 5.3 million undergraduates who were in their third year or above in bachelor's degree programs in 2003–04, 1.4 million received Pell Grants, and just 80,600 would have been eligible for National SMART Grants (Table 12). Very few students in their third year or above met all the requirements for a National SMART Grant. While 24 percent were both U.S. citizens and

Table 12. Number of third-year and above undergraduates in bachelor's degree programs, number who were Pell Grant recipients, and number and percentage who would have been eligible for SMART Grants, by selected student and institutional characteristics: 2003–04

Characteristic	Number of third- year and above undergraduates in bachelor's	Number who were Pell Grant recipients	Number who would have been SMART Grant-eligible*	Percent of total who would have been SMART Grant-eligible*	Percent of Pell Grant recipients who would have been SMART Grant-eligible*
Characteristic	degree programs	recipients	Grant-eligible	Grant-eligible	Grant-eligible
Total	5,313,200	1,385,200	80,600	1.5	5.8
Gender					
Male	2,373,800	565,800	49,500	2.1	8.7
Female	2,939,400	819,400	30,900	1.1	3.8
Race/ethnicity					
White	3,662,400	759,400	48,700	1.3	6.4
Black	601,200	258,800	8,700	1.4	3.4
Hispanic	508,500	215,900	9,900	1.9	4.6
Asian/Pacific Islander	320,700	82,900	8,500	2.6	10.2
American Indian/					
Alaska Native/Othe	r 220,300	68,200	4,800	2.2	7.0
Family income (in 2002)					
Less than \$50,000	2,840,300	1,342,200	76,800	2.7	5.7
\$50,000 or higher	2,472,900	43,000	3,800	0.2	8.9
Expected family contribu	ıtion				
Zero	831,800	565,000	33,500	4.0	5.9
Less than \$2,000	783,200	509,300	23,700	3.0	4.7
\$2,000-3,999	568,500	310,900	23,400	4.1	7.5
\$4,000 or higher	3,129,600	#	#	#	#
Type of institution					
Public four-year	3,261,200	846,300	47,300	1.5	5.6
Private not-for-profit					
four-year	1,340,800	356,400	21,600	1.6	6.1
Other four-year	711,100	182,600	11,700	1.6	6.4
Carnegie classification					
Doctoral	2,183,000	492,200	35,200	1.6	7.2
Master's	2,151,600	580,600	22,900	1.1	4.0
Bachelor's	671,700	229,200	16,600	2.5	7.3
Associate	79,600	14,000	‡	‡	‡
Specialized	226,400	68,500	5,000	2.2	7.4

[#] Rounds to zero.

[‡] Reporting standards not met (too few cases for a reliable estimate).

^{*} SMART Grant-eligible majors are based on 46 aggregated field of study categories; actual CIP codes were not available. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

Pell Grant recipients, just 18 percent met these two conditions *and* were enrolled full-time, only 9 percent also had a GPA of 3.0 or higher, and only 2 percent met all these requirements and also majored in an eligible field (Figure 34).

In 1999–2000, there were fewer undergraduates in their third year or above (4.4 million), fewer Pell Grant recipients (1.1 million), and fewer who would have qualified for National SMART Grants (69,600). ⁵⁶ However, the overall *rate* at which students would have qualified for National SMART Grants and the percentages who met each condition would have been about the same in 1999–2000 as in 2003–04 (2 percent)(Figure 34).

The fact that 60,000 National SMART Grants were actually awarded suggests that about 75 percent of potentially eligible students received awards. While implementation difficulties suggest that some students may have been missed, it is difficult to determine precisely how many because (as indicated above) the major codes used to estimate the number of eligible students do not match the National SMART Grant-eligible fields exactly.

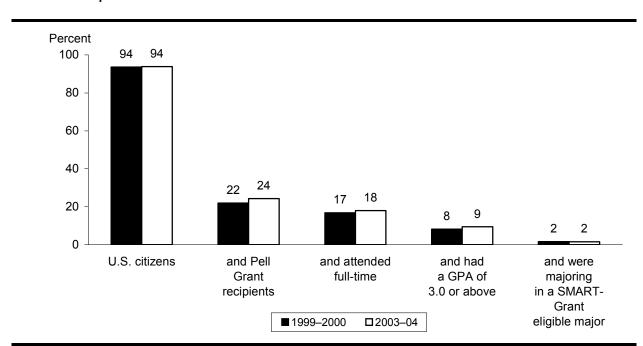


Figure 34. Percentage of third-year and above undergraduates meeting SMART Grant Eligibility requirements: 1999–2000 and 2003–04

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 and 2003–04 National Postsecondary Student Aid Studies (NPSAS:2000 and NPSAS:04).

⁵⁶ U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000). Not shown in table.

Trends in Degrees Awarded in National SMART Grant Majors

The Integrated Postsecondary Education Data System (IPEDS) is useful for tracking changes over time in the number of degrees awarded in National SMART Grant-eligible majors. The survey collects, on a regular basis, data on the number of bachelor's degrees awarded by major field of study at all U.S. postsecondary institutions that participate in federal student financial aid programs.

The proportion of bachelor's degrees awarded in National SMART Grant-eligible majors was about the same (15–16 percent) in 1995–96 as it was in 2005–06.

Between these two years, the total number of bachelor's degrees awarded increased by 34 percent (from about 1.1 million to 1.5 million), and the number of degrees awarded in National SMART Grant-eligible majors grew by 37 percent (from about 174,000 to 239,000) (Table 13). As a result, the proportion of bachelor's degrees awarded in these majors remained about the same during this period.

Table 13. Number and percentage of all bachelor's degrees awarded in SMART Grant-eligible majors: 1995–96, 2000–01, and 2005–06

		Number of	Percent of
	Number of	bachelor's	all bachelor's
	bachelor's	degrees	degrees
	degrees	awarded in	that were in
	awarded in	SMART Grant-	SMART Grant-
Academic year	all majors	eligible majors*	eligible majors*
1995–96	1,127,400	174,300	15.5
2000–01	1,256,300	187,100	14.9
2005–06	1,512,400	238,600	15.8

^{*} Includes mathematics, science, technology, engineering, and certain critical languages. See Appendix A for a complete list of qualifying majors.

Table 14 shows the number of bachelor's degrees awarded in National SMART Grant-eligible majors in each state, ranked from highest to lowest based on the number of awards in 2005–06. It also shows the proportion of all bachelor's degrees that were awarded in these fields. Five states accounted for more than a third of all bachelor's degrees awarded in National SMART Grant majors: California (11 percent), New York (7 percent), Pennsylvania (6 percent), Texas (6 percent), and Illinois (5 percent).

NOTE: Excludes degrees awarded to nonresident alien (international) students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1995–96, 2000–01, and 2005–06.

Table 14. Number and percentage of all bachelor's degrees awarded in SMART Grant-eligible majors and percentage distribution by state: 1995–96, 2000–01, and 2005–06

					centage of		Percentage distribution by state	
State	1995–96	Total number 1995–96 2000–01 2005–06			bachelor's degrees 1995–96 2000–01 2005–06			
State	1995–90	2000-01	2005-00	1995-90	2000-01	2005-00	2005–06	
Total	174,300	187,100	238,600	15.5	14.9	15.8	100.0	
California	18,100	19,400	26,300	17.1	15.9	17.4	11.0	
New York	12,900	13,900	15,700	13.9	14.5	14.1	6.6	
Pennsylvania	10,400	11,000	14,200	17.2	16.1	17.2	6.0	
Texas	9,700	10,500	13,800	14.1	13.6	15.1	5.8	
Illinois	7,600	8,200	11,200	15.0	14.7	16.1	4.7	
Michigan	7,600	7,700	9,200	17.7	16.4	17.4	3.8	
Florida	5,500	6,300	9,000	12.4	12.0	12.9	3.8	
Ohio	7,200	7,300	8,600	15.2	13.8	14.1	3.6	
Massachusetts	6,700	6,700	7,900	17.4	15.4	16.1	3.3	
North Carolina	5,600	6,000	7,200	17.2	16.2	16.8	3.0	
Virginia	5,500	5,900	6,500	17.8	17.5	16.1	2.7	
Indiana	5,300	5,500	6,400	17.8	16.7	16.2	2.7	
Georgia	4,400	4,500	6,200	16.4	15.7	17.1	2.6	
Colorado	3,900	4,000	5,900	19.6	18.0	20.9	2.5	
Wisconsin	3,500	4,200	5,800	13.4	13.7	16.4	2.4	
Maryland	3,700	4,100	5,500	18.1	18.3	20.8	2.3	
Arizona	2,500	2,700	5,200	15.0	13.4	16.6	2.2	
Missouri	3,800	4,500	5,100	14.3	14.4	14.4	2.2	
New Jersey	3,700	4,400	5,100	15.5	16.3	15.9	2.1	
Minnesota	3,200	3,600	4,800	13.9	14.5	15.6	2.0	
Washington	3,100	3,500	4,700	14.5	14.9	16.2	2.0	
Alabama	3,200	3,200	3,600	16.2	15.2	15.9	1.5	
Tennessee	3,000	2,900	3,500	14.7	12.3	12.9	1.5	
Iowa	2,400	2,700	3,500	14.2	13.3	14.6	1.5	
Utah	2,400	2,600	3,400	16.1	15.2	17.0	1.4	
Louisiana	2,600	3,000	3,300	14.9	15.0	16.8	1.4	
Oregon	2,000	2,200	3,100	15.9	16.0	16.9	1.3	
South Carolina	2,400	2,500	3,100	16.4	15.1	15.1	1.3	
Oklahoma	1,800	1,900	2,700	13.5	13.1	14.7	1.1	
Kansas	2,100	2,300	2,500	14.8	15.8	14.6	1.1	
Kentucky	2,100	2,000	2,400	14.4	12.3	12.5	1.0	
Connecticut	1,700	1,700	2,200	12.8	11.5	11.8	0.9	
District of Columbia	900	1,700	1,800	13.9	20.7	16.4	0.8	
Mississippi	1,400	1,500	1,800	14.7	13.4	15.1	0.7	
Nebraska	1,200	1,400	1,700	12.7	12.5	13.2	0.7	
Arkansas	1,100	1,200	1,500	12.9	12.8	13.4	0.6	
West Virginia	1,200	1,100	1,400	13.8	13.3	13.8	0.6	
Rhode Island	1,000	1,100	1,300	11.6	12.5	13.5	0.6	
New Mexico	1,000	1,000	1,300	15.8	15.1	16.6	0.5	
South Dakota	700	700	1,200	16.6	16.0	21.1	0.5	

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Table 14. Number and percentage of all bachelor's degrees awarded in SMART Grant-eligible majors and percentage distribution by state: 1995–96, 2000–01, and 2005–06—Continued

	Т	otal numbei			centage of a		Percentage distribution by state
State	1995–96	2000–01	2005–06	1995–96	2000–01	2005–06	2005–06
Idaho	700	700	1,200	14.8	15.7	15.2	0.5
New Hampshire	1,000	900	1,100	14.1	12.6	13.7	0.5
Maine	800	900	1,100	15.3	15.6	16.6	0.5
Montana	800	900	1,000	17.0	16.2	20.0	0.4
North Dakota	700	700	900	15.4	14.3	15.7	0.4
Nevada	400	500	800	12.7	11.0	12.6	0.3
Hawaii	500	500	700	12.7	10.7	13.5	0.3
Vermont	500	500	700	10.4	10.3	13.5	0.3
Delaware	600	500	700	13.1	12.3	12.2	0.3
Wyoming	300	300	400	18.0	17.0	23.0	0.2
Alaska	200	200	300	16.8	17.1	20.0	0.1

NOTE: Excludes degrees awarded to nonresident alien (international) students. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1995–96, 2000–01, and 2005–06.

For-profit four-year institutions awarded relatively more bachelor's degrees in National SMART Grant majors in 2005–06 than did public or private nonprofit institutions (23 percent vs. 17 and 13 percent, respectively) (Table 15). Overall, however, for-profit institutions awarded just 6 percent of all degrees in National SMART Grant majors. A majority (67 percent) of all degrees in National SMART Grant majors were awarded at public four-year institutions.

Table 15. Number and percentage of all bachelor's degrees awarded in SMART Grant-eligible majors and percentage distribution by type of institution: 1995–96, 2000–01, and 2005–06

	1	Total numbe	er		rcentage of		Percentage distribution by type of institution
Type of institution	1995–96	2000–01	2005–06	1995–96	2000–01	2005–06	2005–06
Total	174,300	187,100	238,500	15.5	14.9	15.8	100.0
Sector of institution							
Public four-year	117,600	122,900	160,100	15.6	15.1	16.6	67.1
Private not-for-profit four-year	53,400	58,500	65,000	14.6	13.9	13.3	27.3
Private for-profit four-year	3,400	5,600	13,500	33.9	25.2	23.0	5.6

NOTE: Excludes degrees awarded to nonresident alien (international) students. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1995–96, 2000–01, and 2005–06.

Conclusion

Based on analysis of data collected before the ACG and National SMART Grant programs existed, approximately 280,000 first-year students (and an unknown number of second-year students) would have been eligible for an ACG, and 80,000 would have been eligible for a National SMART Grant had these programs existed a few years earlier. As the participation data described in the previous chapter showed, actual participation was lower. For both ACGs and National SMART Grants, each eligibility requirement reduces the number of Pell Grant recipients eligible for the grants, but the academic requirements appear to pose the greatest barrier.

The ACG estimates also showed that the percentage of students meeting the eligibility criteria differed between 1995–96 and 2003–04. This pattern of change is consistent with the analysis of course-taking data that showed an increase between 1990 and 2005 in the percentage of students completing a rigorous high school program. Whether the percentages will increase further is unknown, but high school graduation standards continue to rise, suggesting that they may.

The proportion of students earning degrees in National SMART Grant-eligible fields has remained stable, despite extensive efforts to attract students into these fields. At the federal level alone, a recent inventory identified almost 100 programs with a mathematics or science education focus (U.S. Department of Education 2007).

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CHAPTER 6

Summary of U.S. Department of Education and Stakeholder Recommendations

During the first year, recommendations for improving the Academic Competitiveness Grant (ACG) and National Science and Mathematics Access to Retain Talent (National SMART) Grant programs have come from a number of sources, including the U.S. Department of Education, stakeholders, and participants in the negotiated-rulemaking process. These recommendations suggested ways to solve administrative problems and also to increase the number of eligible students. The following recommendations come directly from the stakeholder organizations cited in Chapter 2 and from the Department of Education.

As discussed in Chapter 2, the Department clarified much of the confusion surrounding interpretation of the legislation during the negotiated-rulemaking process. The Department responded to some concerns, but it took the position that certain changes could not be made without modifying the legislation. Thus, recommendations to lessen some of the eligibility restrictions were not accepted.

The recommendations described here are based on suggestions from the Department and from stakeholders. They seek to help maximize the implementation and reach of the ACG and National SMART Grant programs. In many cases, stakeholders have taken the initiative to correct the areas that most concerned them about the first-year implementation process. Some school districts, institutions, states, and organizations have developed ways to improve marketing efforts to middle and high school students and have taken the initiative to create training materials for administrators and other key educational staff.

U.S. Department of Education

The U.S. Department of Education's Web site provides examples of solutions to many of the issues that institutions faced during the first-year implementation of these grants. A summary of the Department's suggestions to stakeholders follows.⁵⁷

Increasing the Number of Eligible Students

The Department has urged high school and postsecondary staff and administrators, states, and organizations to

⁵⁷ The complete document is available at: http://www.ed.gov/programs/smart/results2007/national.pdf.

- (1) Know the state's "rigorous curriculum";
- (2) Commit to doubling the number of ACG and National SMART Grant recipients by 2010–11; and
- (3) Provide low-income students with access to rigorous course work.

Identifying Eligible Students

The Department cites three examples of innovative ways to identify eligible students. They suggest that institutions and states develop a "core curriculum for college admissions." States can also send institutions a list of students who qualify for the ACG based on their completion of this core curriculum. Institutions can work with all Pell Grant recipients to determine their eligibility, instead of relying on a student's self-identification.

Marketing the Programs

The Department suggests that states can incorporate information about these grants into existing state, local, and school-level outreach programs and materials. As an example, they cite the Indiana Commission on Higher Education's college outreach program called Learn More Indiana. Beginning in the eighth grade, students receive a magazine on postsecondary enrollment. Students and parents have access to a Web site on college and receive information on college financing, and information on the ACG and National SMART Grant "are presented as options in every contact with students and high school counselors."

Providing Access to a Rigorous Curriculum

The Department recommended that states can make their college preparatory curriculum the standard curriculum required for graduation. States can also develop their own incentive programs that target and reward low-income students who complete rigorous course work. The Department highlights Minnesota, for example, which in 2007 enacted the ACHIEVE Scholarship that gives an additional \$1,200 to low-income students who complete a rigorous high school curriculum. The Department also recommends standardizing high school curricula within states so that (1) the standard course requirements meet the rigorous curriculum requirements outlined by the Department, and (2) ensuring that the curriculum offered is aligned with college admissions requirements. Confusion about program requirements would naturally decrease by reducing the complexity of high school pathways to college. The Arkansas Department of Education, also referenced by the Department, requires high school students to complete a college prep curriculum called *National SMART Core*, which they have actively marketed throughout the state.

Stakeholders

The stakeholder recommendations echo those of the Department, but they also call for an increased federal role in devising and applying solutions to the implementation problems faced by stakeholders.

Increased Marketing Efforts

All of the stakeholders interviewed for this study felt there should be increased marketing efforts for these programs. They believed that increased communication and coordination among states, students, parent organizations, and other stakeholders would contribute to the success of the grants and would extend their reach. The stakeholders suggested that this information would be best delivered by using existing vehicles, such as partnering with parent organizations, including the information with the Department's recommendations for parental involvement provisions (as part of the reauthorization of the *No Child Left Behind Act of 2001*), sending information through athletic coaches, or having schools distribute information with report cards.

According to the stakeholders who were interviewed, the National SMART Grant programs could be better marketed by working with major advisors, displaying information in financial aid offices, and working with teachers' unions and community representatives. Members from the United States Student Association (USSA) suggested that e-mail would be a good way to reach students, and many financial aid offices have e-mail distribution lists. The USSA also mentioned that there needs to be much broader support and buy-in from the community and faculty to increase the impact of these grants on students. Pell Institute staff mentioned existing support services that target students in low-income schools—the TRIO and GEAR UP programs, which reach students beginning in the sixth grade and provide college counseling—and the Talent Search program, which focuses on financial aid as well.

Several stakeholders suggested that states may also want to consider adding their own financial incentives to encourage low-income students to complete rigorous course work in high school, similar to the Indiana's *Learn More Indiana* college outreach initiative, cited in Chapter 2.

Training Programs/Workshops on Financial Aid

Several stakeholders suggested that the Department work with other stakeholders to develop a training program on college financial aid options. These training programs, or workshops, could be geared toward students, parents, teachers, guidance counselors, or financial aid administrators. They also created a PowerPoint presentation for schools and colleges to download, describing the different financial aid options available to students and their families.

The National Association for College Admission Counseling (NACADA) reported that a member survey showed that the majority of college admissions counselors do not know much about financial aid, with 75 percent wanting more training in this area. The counselors said that their most trusted sources of financial aid information are college aid staff and the state and federal governments. NACADA is trying to encourage its membership to use the Department's Information for Financial Aid Professionals (IFAP) Web site, but members only spend one-third of their time on college counseling and the rest on other job responsibilities. Members currently consider the ACG program "complex," and an Association survey suggests that admissions counselors need more support in understanding it. Members prefer print resources over Web resources because they can be easily copied and distributed to students and parents. This is especially true in low-income schools, when admissions counselors often lack the resources to access online materials.

Both the National Association of Student Financial Aid Administrators and the American Association of Collegiate Registrars have developed materials for their members that explain the intricacies of the ACG and National SMART Grant programs. The Student Financial Aid Administrators have developed and distributed a presentation for financial aid administrators to use during high school presentations. Many of the programs with which the Council for Opportunity in Education works, such as Upward Bound and Talent Search, are based on college campuses, so precollege training is connected to the college—which facilitates persistence and retention. The representative from the Pell Institute said their leaders were surprised that there was not much marketing or training for these programs.

Transcript Notation

Several stakeholders asked that high schools or states determine which students may be eligible for the ACG program by noting on their high school transcripts that they have completed a rigorous high school program. Doing so would reduce the burden on open enrollment institutions, such as community colleges, and other colleges and universities that receive a large number of out-of-state applications. For example, Texas and Florida are able to annotate students' transcripts if they have met the ACG high school eligibility requirements. The Association of State Student Grant Programs suggested that high schools or states could partner with the National Student Clearinghouse to collect high school transcript data. The clearinghouse is already a repository of degree, diploma, and enrollment data for postsecondary and high schools and districts and meets the *Family Educational Rights and Privacy Act* (*FERPA*) confidentiality and security requirements.

Increased Communication Between High School and College Counselors

According to the stakeholders interviewed, more work needs to be done on bridging the gaps between high school and college counseling, although it is unclear what role the federal

government may play in this work. A number of issues were raised by stakeholders that contribute to the disconnect between these two important groups: a college curriculum that does not include course work on financial aid, understaffing, limited communication between high schools and local colleges, and so on.

Financial Aid Toolkit

Stakeholders also recommend creating a toolkit that would provide an easy-to-use resource for school counselors, students, teachers, and stakeholder organizations, such as the National PTA and USSA, to help facilitate and improve communication on financial aid issues. The toolkit would provide material that could be used in the classroom, as part of a college readiness curriculum, or on its own. It could include audience-specific worksheets and handouts that could be easily copied and distributed.

Regular Stakeholder Feedback

The Department should continue to give stakeholders a forum in which to share their experiences in implementing the ACG and National SMART Grant programs. Given that much of the success of these programs relies on the accurate and timely dissemination of information at the middle and high school levels, future feedback sessions should be broadened to include other elementary and high school stakeholders, such as the National Council of Teachers of Mathematics (NCTM), National Science Teachers Association (NSTA), National Middle School Association (NMSA), American Association of School Administrators (AASA), and National Education Association (NEA). These sessions could take the form of national surveys and could even be broadened to capture feedback from students, parents, and teachers.

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List of National SMART Grant-Eligible Majors

National SMART Grant—Fields of Study (as of Aug. 25, 2006)

The secretary has designated the following fields of study as eligible for the National Science and Mathematics Access to Retain Talent (National SMART) Grant Program to the extent that a student is enrolled in a bachelor's degree or a graduate degree program that includes at least three academic years of undergraduate education.⁵⁸

Computer science: The branch of knowledge or study of computers, including such fields of knowledge or study as computer hardware, computer software, computer engineering, information systems, and robotics.

Associated NCES CIP CODES: 11.xxxx

Engineering: The science by which the properties of matter and the sources of energy in nature are made useful to humanity in structures, machines, and products, as in the construction of engines, bridges, buildings, mines, and chemical plants, including such fields of knowledge or study as aeronautical engineering, chemical engineering, civil engineering, electrical engineering, industrial engineering, materials engineering, manufacturing engineering, and mechanical engineering.

Associated NCES CIP CODES: 14.xxxx

Foreign Language: Instructional programs that focus on foreign languages and literatures, the humanistic and scientific study of linguistics, and the provision of professional interpretation and translation services.

Associated NCES CIP CODES: 16.xxxx

Life sciences: The branch of knowledge or study of living things, including such fields of knowledge or study as biology, biochemistry, biophysics, microbiology, genetics, physiology, botany, zoology, ecology, and behavioral biology, except that the term does not encompass the health professions.

Associated NCES CIP CODES: 26.xxxx; 01.xxxx

Mathematics: The branch of knowledge or study of numbers and the systematic treatment of magnitude, relationships between figures and forms, and relations between quantities expressed symbolically, including such fields of knowledge or study as statistics, applied mathematics, and operations research.

Associated NCES CIP CODES: 27.xxxx

Physical sciences: The branch of knowledge or study of the material universe, including such fields of knowledge or study as astronomy, atmospheric sciences, chemistry, earth sciences, ocean sciences, physics, and planetary sciences.

Associated NCES CIP CODES: 40.xxxx

Technology: The application of mechanical or scientific knowledge, for example, applied science.

Related NCES CIP CODES: 41.xxxx; 29.xxxx 15.xxxx

Several Multidisciplinary Studies are also considered eligible for National SMART Grants.

Associated NCES CIP CODES: 30.xxxx

⁵⁸ This list was expanded for 2007–08 to include Natural Resources and Conservation (NCES CIP CODES 03.xxxx) and Psychology (NCES CIP CODES 42.xxxx). No additions were made for 2008–09.

Computer Science

11.01 Computer and Information Sciences, General 11.0101 Computer and Information Sciences,	11.08 Computer Software and Media Applications 11.0801 Web Page, Digital/Multimedia and
General 11.0102 Artificial Intelligence and Robotics 11.0103 Information Technology	Information Resources Design 11.0802 Data Modeling/Warehousing and Database Administration
11.0199 Computer and Information Sciences, Other	11.0803 Computer Graphics
11.02 Computer Programming 11.0201 Computer Programming/Programmer,	11.0899 Computer Software and Media Applications, Other
General 11.0202 Computer Programming, Specific	11.09 Computer Systems Networking and Telecommunications 11.0901 Computer Systems Networking and
Applications 11.0203 Computer Programming, Vendor/Product	Telecommunications 11.10 Computer/Information Technology Administration and
Certification 11.0299 Computer Programming, Other	Management 11.1001 System Administration/Administrator
11.03 Data Processing 11.0301 Data Processing and Data Processing	11.1002 System, Networking, and LAN/WAN Management/Manager
Technology/Technician	11.1003 Computer and Information Systems Security
11.04 Information Science/Studies 11.0401 Information Science/Studies	11.1004 Web/Multimedia Management and Webmaster 11.1099 Computer/Information Technology Services
11.05 Computer Systems Analysis 11.0501 Computer Systems Analysis/Analyst	Administration and Management, Other 11.99 Computer and Information Sciences and Support
11.07 Computer Science 11.0701 Computer Science	Services, Other 11.9999 Computer and Information Sciences and Support Services, Other

Engineering					
 14.01 Engineering, General 14.0101 Engineering, General 14.02 Aerospace, Aeronautical and Astronautical Engineering 14.0201 Aerospace, Aeronautical and Astronautical Engineering 	14.09 Computer Engineering, General 14.0901 Computer Engineering, General 14.0902 Computer Hardware Engineering 14.0903 Computer Software Engineering 14.0999 Computer Engineering, Other				
14.03 Agricultural/Biological Engineering and Bioengineering 14.0301 Agricultural/Biological Engineering and Bioengineering	14.10 Electrical, Electronics and Communications Engineering 14.1001 Electrical, Electronics and Communications				
14.04 Architectural Engineering 14.0401 Architectural Engineering 14.05 Biomedical/Medical Engineering	Engineering 14.11 Engineering Mechanics 14.1101 Engineering Mechanics				
14.0501 Biomedical/Medical Engineering14.06 Ceramic Sciences and Engineering	14.12 Engineering Physics 14.1201 Engineering Physics				
14.0601 Ceramic Sciences and Engineering 14.07 Chemical Engineering	14.13 Engineering Science 14.1301 Engineering Science				
14.0701 Chemical Engineering 14.08 Civil Engineering 14.0801 Civil Engineering, General	14.14 Environmental/Environmental Health Engineering 14.1401 Environmental/Environmental Health Engineering				
14.0802 Geotechnical Engineering14.0803 Structural Engineering	14.18 Materials Engineering 14.1801 Materials Engineering				
14.0804 Transportation and Highway Engineering14.0805 Water Resources Engineering14.0899 Civil Engineering, Other	14.19 Mechanical Engineering 14.1901 Mechanical Engineering				

14.20 Metallurgical Engineering

14.2001 Metallurgical Engineering

14.21 Mining and Mineral Engineering

14.2101 Mining and Mineral Engineering

14.22 Naval Architecture and Marine Engineering

14.2201 Naval Architecture and Marine Engineering

14.23 Nuclear Engineering

14.2301 Nuclear Engineering

14.24 Ocean Engineering

14.2401 Ocean Engineering

14.25 Petroleum Engineering

14.2501 Petroleum Engineering

14.27 Systems Engineering

14.2701 Systems Engineering

14.28 Textile Sciences and Engineering

14.2801 Textile Sciences and Engineering

14.31 Materials Science

14.3101 Materials Science

14.32 Polymer/Plastics Engineering

14.3201 Polymer/Plastics Engineering

14.33 Construction Engineering

14.3301 Construction Engineering

14.34 Forest Engineering

14.3401 Forest Engineering

14.35 Industrial Engineering

14.3501 Industrial Engineering

14.36 Manufacturing Engineering

14.3601 Manufacturing Engineering

14.37 Operations Research

14.3701 Operations Research

14.38 Surveying Engineering

14.3801 Surveying Engineering

14.39 Geological/Geophysical Engineering

14.3901 Geological/Geophysical Engineering

14.99 Engineering, Other

14.9999 Engineering, Other

Critical Foreign Language

16.0301 16.0302 16.0303 16.0402 16.0701 16.0704 16.0705 16.0707	African Languages, Literatures, and Linguistics Chinese Language and Literature Japanese Language and Literature Korean Language and Literature Russian Language and Literature Hindi Language and Literature Bengali Language and Literature Panjabi Language and Literature Urdu Language and Literature Iranian/Persian Languages, Literatures, and	16.1101 16.1102 16.1402 16.1404 16.1501	Portuguese Language and Literature Arabic Language and Literature Hebrew Language and Literature Bahasa Indonesian/Bahasa Malay Languages and Literatures Filipino/Tagalog Language and Literature Turkish Language and Literature Turkic, Ural-Altaic, Caucasian, and Central Asian Languages, Literatures, and Linguistics, Other
16.0801	Iranian/Persian Languages, Literatures, and Linguistics		Linguistics, Other
	Linguiotico		

Life Sciences

26. BIOLOGICAL AND BIOMEDICAL SCIENCES	26.0299 Biochemistry, Biophysics and Molecular
26.01 Biology, General	Biology, Other
26.0101 Biology/Biological Sciences, General	26.03 Botany/Plant Biology
26.0102 Biomedical Sciences, General	26.0301 Botany/Plant Biology
26.02 Biochemistry, Biophysics and Molecular Biology	26.0305 Plant Pathology/Phytopathology
26.0202 Biochemistry	26.0307 Plant Physiology
26.0203 Biophysics	26.0308 Plant Molecular Biology
26.0204 Molecular Biology	26.0399 Botany/Plant Biology, Other
26.0205 Molecular Biochemistry	26.04 Cell/Cellular Biology and Anatomical Sciences
26.0206 Molecular Biophysics	26.0401 Cell/Cellular Biology and Histology
26.0207 Structural Biology	26.0403 Anatomy
26.0208 Photobiology	26.0404 Developmental Biology and Embryology
26.0209 Radiation Biology/Radiobiology	26.0405 Neuroanatomy
26.0210 Biochemistry/Biophysics and Molecular	26.0406 Cell/Cellular and Molecular Biology
Biology	26.0407 Cell Biology and Anatomy

26.05 Microbio	Cell/Cellular Biology and Anatomical Sciences, Other logical Sciences and Immunology Microbiology, General	26.1	26.1101 26.1102 26.1103	ematics and Bioinformatics Biometry/Biometrics Biostatistics Bioinformatics
26.0504 26.0505 26.0506 26.0507	Medical Microbiology and Bacteriology Virology Parasitology Mycology Immunology		2 Biotechn 26.1201 3 Ecology, 26.1301	Biotechnology Evolution, Systematics and Population Biology Ecology
26.07 Zoology/ 26.0701 26.0702 26.0707 26.0708	Microbiological Sciences and Immunology, Other Animal Biology Zoology/Animal Biology Entomology Animal Physiology Animal Behavior and Ethology Wildlife Biology		26.1302 26.1303 26.1304 26.1305 26.1307 26.1308	Marine Biology and Biological Oceanography Evolutionary Biology 8/25/2006 Aquatic Biology/Limnology Environmental Biology Population Biology Conservation Biology Systematic Biology/Biological Systematics Epidemiology
	Zoology/Animal Biology, Other			Ecology, Evolution, Systematics and Population Biology, Other
26.0802	Genetics, General Molecular Genetics Microbial and Eukaryotic Genetics		26.9999	al and Biomedical Sciences, Other Biological and Biomedical Sciences, Other
26.0804 26.0805	Animal Genetics Plant Genetics Human/Medical Genetics		RELATE Animal S	
	Genetics, Other gy, Pathology and Related Sciences		01.0902	Animal Sciences, General Agricultural Animal Breeding
26.0901 26.0902 26.0903 26.0904 26.0905	Physiology, General Molecular Physiology Cell Physiology Endocrinology Reproductive Biology Neurobiology and Neurophysiology		01.0904 01.0905 01.0906 01.0907	Animal Health Animal Nutrition Dairy Science Livestock Management Poultry Science Animal Sciences, Other
26.0907 26.0908 26.0909 26.0910 26.0911	Cardiovascular Science Exercise Physiology 8/25/2006 Vision Science/Physiological Optics Pathology/Experimental Pathology Oncology and Cancer Biology Physiology, Pathology, and Related Sciences, Other	01.1	01.1102 01.1103 01.1104 01.1105	Plant Sciences, General Agronomy and Crop Science Horticultural Science Agricultural and Horticultural Plant Breeding Plant Protection and Integrated Pest Management
	cology and Toxicology Pharmacology			Range Science and Management Plant Sciences, Other
26.1002 26.1003 26.1004 26.1005 26.1006 26.1007	Molecular Pharmacology Neuropharmacology Toxicology Molecular Toxicology Environmental Toxicology Pharmacology and Toxicology Pharmacology and Toxicology, Other	01.12	01.1202 01.1203	Soil Science and Agronomy, General Soil Chemistry and Physics Soil Microbiology Soil Sciences, Other

Mathematics

27.01 Mathematics	27.0303 Computational Mathematics
27.0101 Mathematics, General	27.0399 Applied Mathematics, Other
27.0102 Algebra and Number Theory	27.05 Statistics
27.0103 Analysis and Functional Analysis	27.0501 Statistics, General
27.0104 Geometry/Geometric Analysis	27.0502 Mathematical Statistics and Probability
27.0105 Topology and Foundations	27.0599 Statistics, Other
27.0199 Mathematics, Other	27.99 Mathematics and Statistics, Other
27.03 Applied Mathematics	27.9999 Mathematics and Statistics, Other
27.0301 Applied Mathematics	,

Physical Sciences

40.01 Physical Sciences	40.06 Geological and Earth Sciences/Geosciences
40.0101 Physical Sciences	40.0601 Geology/Earth Science, General
40.02 Astronomy and Astrophysics 40.0201 Astronomy 40.0202 Astrophysics 40.0203 Planetary Astronomy and Science 40.0299 Astronomy and Astrophysics, Other 40.04 Atmospheric Sciences and Meteorology 40.0401 Atmospheric Sciences and Meteorology,	40.0602 Geochemistry 40.0603 Geophysics and Seismology 40.0604 Paleontology 40.0605 Hydrology and Water Resources Science 40.0606 Geochemistry and Petrology 40.0607 Oceanography, Chemical and Physical 40.0699 Geological and Earth Sciences/Geosciences,
General 40.0402 Atmospheric Chemistry and Climatology 40.0403 Atmospheric Physics and Dynamics 40.0404 Meteorology 40.0499 Atmospheric Sciences and Meteorology, Other 40.05 Chemistry 40.0501 Chemistry, General 40.0502 Analytical Chemistry 40.0503 Inorganic Chemistry 40.0504 Organic Chemistry 40.0506 Physical and Theoretical Chemistry 40.0507 Polymer Chemistry 40.0508 Chemical Physics 40.0599 Chemistry, Other	Other 40.08 Physics 40.0801 Physics, General 40.0802 Atomic/Molecular Physics 40.0804 Elementary Particle Physics 40.0805 Plasma and High-Temperature Physics 40.0806 Nuclear Physics 40.0807 Optics/Optical Sciences 40.0808 Solid State and Low-Temperature Physics 40.0809 Acoustics 40.0810 Theoretical and Mathematical Physics 40.0899 Physics, Other 40.9999 Physical Sciences, Other 40.9999 Physical Sciences, Other

Technology			
15. ENGINEERING TECHNOLOGIES/TECHNICIANS15.00 Engineering Technology, General15.0000 Engineering Technology, General	15.0304 Laser and Optical Technology/Technician 15.0305 Telecommunications Technology/Technician 15.0399 Electrical and Electronic Engineering Technologies/Technicians, Other		
15.01 Architectural Engineering Technologies/Technicians 15.0101 Architectural Engineering Technology/Technician	15.04 Electromechanical Instrumentation and Maintenance Technologies/Technicians 15.0401 Biomedical Technology/Technician		
15.02 Civil Engineering Technologies/Technicians 15.0201 Civil Engineering Technology/Technician	15.0403 Electromechanical Technology/ Electromechanical Engineering Technology		
15.03 Electrical Engineering Technologies/Technicians 15.0303 Electrical, Electronic and Communications Engineering Technology/Technician	15.0404 Instrumentation Technology/Technician 15.0405 Robotics Technology/Technician		

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Multidisciplinary Studies

30. MULTI/INTERDISCIPLINARY STUDIES

30.01 Biological and Physical Sciences 30.0101 Biological and Physical Sciences

30.06 Systems Science and Theory

30.0601 Systems Science and Theory

30.08 Mathematics and Computer Science

30.0801 Mathematics and Computer Science

30.1501 Science, Technology and Society

30.16 Accounting and Computer Science
30.1601 Accounting and Computer Science

30.18 Natural Sciences

30.1801 Natural Sciences

30.24 Neuroscience

30.2401 Neuroscience

30.25 Cognitive Science

30.2501 Cognitive Science

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APPENDIX B

History of the ACG and National SMART Grant Programs

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
Feb. 1, 2006. Effective as of July 1, 2006, for the 2006–07 academic year.	Congress passes the Higher Education Reconciliation Act of 2005 as part of the Deficit Reduction Act of 2005. http://www.govtrack.us/congress/billtext.xpd?bill =s109-1932	An eligible student may receive an Academic Competitiveness Grant (ACG) of up to \$750 for the first academic year of study and up to \$1,300 for the second academic year of study. To be eligible for each academic year, a student must:
		Be a U.S. citizen;
		Be a Federal Pell Grant recipient;
		Be enrolled full-time in a degree program;
		Be enrolled in the first or second academic year of his or her program of study at a two-year or four-year degree-granting institution;
		Have completed a rigorous secondary school program of study established by a state or local education agency and recognized as such by the secretary (after Jan. 1, 2006, if a first-year student, and after Jan. 1, 2005, if a second-year student);
		If a first-year student, not have been previously enrolled in an undergraduate program; and
		If a second-year student, have at least a cumulative 3.0 grade point average for the first academic year.
		An eligible student may receive a National Science and Mathematics Access to Retain Talent (National SMART) Grant of up to \$4,000 for each of the third and fourth academic years of study. To be eligible for each academic year, a student must:
		Be a U.S. citizen;
		Be a Federal Pell Grant recipient;
		Be enrolled full-time in a degree program;
		Be enrolled in a four-year degree-granting institution;
		Major in physical, life or computer science, engineering, mathematics, technology, or a critical foreign language; and
		Have at least a cumulative 3.0 grade point average in course work required for the major.
		Sunset provision: The authority to make grants under this section shall expire at the end of academic year 2010–11.

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
Feb. 8, 2006	President Bush signs Deficit Reduction Act of 2005/Higher Education Reconciliation Act (HERA) of 2005 into law. http://www.govtrack.us/congress/billtext.xpd?bill=s109-1932	Improving federal student loan programs and increasing benefits to students. The <i>Deficit Reduction Act</i> cuts excess government subsidies to lenders and makes other reforms that will help reduce overall student loan costs by about \$22 billion. This will save taxpayers \$12 billion and increase student aid by \$10 billion.
March 10, 2006	Dear Colleague Letter (GEN-06-02) from the assistant secretary for postsecondary education and the chief operating officer, Federal Student Aid explaining changes to the HEA Title IV loan programs. http://ifap.ed.gov/dpcletters/GEN0602.html	The Department explains the effects of the Higher Education Act on the federal loan programs: the William D. Ford Federal Direct Loan Program, the Federal Perkins Loan Program, and the Federal Family Education Loan (FFEL) Program.
March 14, 2006	Dear Colleague Letter (GEN-06-03) issued as a correction to GEN-06-02. http://ifap.ed.gov/dpcletters/GEN0603.html	Corrects loan limits on page 7 of the GEN-06-02 attachment.
April 5, 2006	Dear Colleague Letter (GEN-06-04) from the assistant secretary for postsecondary education and the chief operating officer, Federal Student Aid on ACG and National SMART Grant programs. http://www.ifap.ed.gov/dpcletters/GEN0604.html	The Department explains the process for administering grants to institutions of higher education through a letter posted on the Department's Web site.
April 27, 2006	Dear Colleague Letter (GEN-06-05) from the assistant secretary for postsecondary education and the chief operating officer, Federal Student Aid on changes made by the <i>Higher Education Reconciliation Act of 2005 (HERA)</i> . http://www.ifap.ed.gov/dpcletters/attachments/GEN0605.pdf	The Department explains that HERA amends the definition of an "academic year" to require a minimum of 30 hours of instructional time for a program that measures its length in credit hours or a minimum of 24 weeks of instruction for a program that measures its length in clock hours, and for an undergraduate program at least 24 semester or trimester hours (or 36 quarter hours) for a course that measures time in credit hours, or 900 clock hours for a course of study that measures its program length in clock hours.
May 2006	Fact Sheet on student eligibility options http://www.ed.gov/about/inits/ed/competitivenes s/ac-smart.html	
May 2, 2006	Press Release—The Department of Education Announces Student Eligibility Options for New Academic Grants. http://www.ed.gov/news/pressreleases/2006/05/ 05022006.html	
May 2, 2006	Dear Colleague Letter (GEN-06-06) from the Office of Postsecondary Education and Federal Student Aid providing the list of academic	The Department announces guidelines on how students will qualify as having successfully completed a rigorous secondary school

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
	majors eligible for the National SMART Grants for the 2006–07 award year. http://www.ifap.ed.gov/dpcletters/ GEN0606.html	program of study. This letter provides the list of the instructional programs that qualify as eligible majors, including critical foreign language majors, for the National SMART Grant program. These fields of study qualify as eligible majors for the National SMART Grant program to the extent a student is enrolled in a bachelor's degree or a graduate degree program that includes at least three academic years of undergraduate education.
May 2, 2006	Dear Colleague Letter (GEN-06-08) from Secretary Spellings describing plans for implementation. http://www.ifap.ed.gov/dpcletters/ GEN0608.html	Secretary Spellings outlines the initial eligibility requirements for ACGs and National SMART Grants and the Department's options for meeting the "rigorous curriculum" requirement in 2006–07, including recognizing all existing Advanced or Honors diploma programs, the State Scholars Initiative (SSI), a set of courses similar to the SSI, and an Advanced Placement (AP) or International Baccalaureate (IB) course and test option.
May 24, 2006	Guidance on dual enrollment questions	In establishing the ACG program, Congress restricted eligibility for students to receive a first-year ACG to a student who "has not been previously enrolled in a program of undergraduate education." See §401A(c)(3)(A)(ii) of the Higher Education Act. This restriction does not apply where a student enrolled in one or more college level undergraduate courses while still in high school, as long as the student was not admitted into a formal program of study at the postsecondary education institution.
June 1, 2006	Deadline for states to establish and submit to the secretary of education an alternate rigorous secondary school program of study for recognition in the 2006–07 academic year.	
June 20, 2006	Dear Colleague Letter (GEN-06-10) from Secretary Spellings on implementation guidance related to <i>HERA</i> changes. http://www.ifap.ed.gov/dpcletters/attachments/GEN0610.pdf	As processing of the 2006–07 Free Application for Federal Student Aid (FAFSA) began in January 2006, forms, systems, and processes at the Department and Institutions did not account for 2006–07 changes to <i>HERA</i> —additional guidance is issued (e.g., re: increased maximum Adjusted Gross Income for an applicant to be eligible for an auto-zero estimated family contribution (EFC).
June 21, 2006	Press Release—Secretary Spellings announces July 1 availability of \$790 million in new grants for higher education.	
	http://www.ed.gov/news/pressreleases/2006/06/	

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
	06212006.html	
June 29, 2006	Department posts information online for students reviewing the eligibility requirements for the ACG and National SMART Grant programs. http://www.ed.gov/about/inits/ed/competitivenes s/ac-smart2.html	
Late June 2006	States, colleges and students will receive notice of programs that have been recognized as rigorous for grant purposes by the secretary of education for the 2006–07 academic year.	
July 1, 2006	Beginning July 1, 2006, potentially eligible students are notified via email and regular mail that they should submit additional information to the Department to determine ACG eligibility.	
July 3, 2006 Effective Aug. 2, 2006, for the 2006–07 academic year.	Interim Final Regulations are posted in the Federal Register (Vol. 71, No. 127) and comments are requested on or before Aug. 17, 2006. http://www.ed.gov/legislation/FedRegister/proprule/2006-3/070306a.html	The secretary amends Title 34 to establish regulations for the ACG and National SMART Grant programs. The ACG and National SMART Grant programs specify the eligibility requirements for a student to apply for and receive an award under these programs for the 2006–07 award year. These Interim Final Regulations also identify the roles of institutions of higher education (institutions), state education agencies (SEAs), and local education agencies (LEAs) in administering the programs. [These Interim Final Regulations will be effective for the 2006–07 award year. The secretary is, however, soliciting comments on all aspects of these Interim Final Regulations and may, for the 2007–08 award year, amend and finalize them as appropriate in response to comments received. For regulations that would take effect for the 2008–09 award year and subsequent award years, the secretary intends to conduct negotiated rulemaking, as required under section 492 of the HEA.] The ACG and National SMART Grant program Interim Final Regulations duplicate those of the Federal Pell Grant program to the extent practicable given the similar nature of these programs. Like the Federal Pell Grant program, the ACG and National SMART Grant programs provide for direct grants from the federal government to students to assist in paying their college expenses. In addition, a student must be receiving a Federal Pell Grant to be eligible for an ACG or National SMART Grant. The secretary will be administering the ACG and National SMART Grant programs using the

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
		same delivery system that the secretary uses for the Federal Pell Grant program. The secretary expects that this coordination of administrative requirements will assist participating institutions in administering these programs, reduce the amount of additional institutional administrative burden and paperwork, and simplify the process for students to apply for assistance under these programs.
July 3, 2006–Aug. 17, 2006	Comments received from institutions and other organizations	
Aug. 18, 2006	Announcement in Federal Register (Vol. 71, No. 160) of negotiated rulemaking sessions on the changes to the HEA, and nominations of speakers solicited on or before November 9, 2006. Announcement of four regional hearings to be held in Fall 2006 to help determine an agenda for the upcoming sessions.	
	http://www.ed.gov/legislation/FedRegister/proprule/2006-3/081806a.html	
Aug. 25, 2006	Dear Colleague Letter (GEN-06-15) from Acting Asst. Secretary Manning, Office of Postsecondary Education, on revised list of eligible academic majors.	Revised the list of eligible academic majors previously provided (GEN-06-06) to include certain majors that were inadvertently omitted.
	http://www.ifap.ed.gov/dpcletters/Gen0615.html	
Fall 2006	Institutions of higher education will verify student eligibility using records of high school performance. Student aid will be disbursed.	
Sept. 19, 2006–Nov. 8, 2006	Regional hearings on upcoming agenda for negotiated rulemaking sessions for revised regulations for the 2008–09 award year	
Oct. 20, 2006	Dear Colleague Letter (GEN-06-18) from the acting assistant secretary for postsecondary education providing guidance to institutions concerning implementation of the "academic year" definition within the ACG and National SMART Grant programs for the 2006–07 and 2007–08 award years. http://www.ifap.ed.gov/dpcletters/GEN0618.html	The Department offered two approaches to determining "academic year," assuming that there were 30 weeks of instructional time for each increment of credit hours that comprises the institution's Title IV academic year (e.g., 24 credit hours equals 30 weeks of instruction, or 30 credit hours equals 30 weeks of instruction) OR determine the actual number of weeks of instruction by reviewing the student's record to see how many weeks it took the student to complete the credit hours earned (subtracting credits for AP or IB course work, testing out, life experience). Also addressed fourth year students who had exceeded four times the number of academic credits in an academic program that required more than that for

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
		completion.
Nov. 1, 2006	Deadline for states to establish and submit to the secretary of education additional rigorous secondary school programs of study for recognition in the 2007–08 academic year.	
Nov. 1, 2006 Effective 2007–08 award year	Final Regulations published in the Federal Register (Vol. 71, No. 211) with responses to the 80 comments received between July 3, 2006 and Aug. 17, 2006. http://www.ed.gov/legislation/FedRegister/finrule/2006-4/110106a.html	Revisions to regulations, developed through the analysis of comments received on the Interim Final Regulations published on July 3, 2006. The secretary invited comments on the interim Final Regulations and received 80 comments. The ACG regulations respond to the growing number of states and local educational agencies that are trying to increase students' access to rigorous classes in high school. The package includes a new provision that allows state and local education agencies to submit rigorous curriculum for approval beyond the following year. Other provisions clarify how to account for Advanced Placement (AP), International Baccalaureate (IB) and dual enrollment credits, and how to determine GPAs for students who attend schools or institutions that do not issue numeric or letter grades. The National SMART Grant regulations include a new provision explaining how an institution can submit petitions to have additional majors included as National SMART-eligible majors. Other provisions clarify the existing regulations that require National SMART recipients to be enrolled in and making progress toward a National SMART-eligible major.
Jan. 2007	States receive notice of rigorous secondary school programs of study that have been recognized by the secretary of education for the 2007–08 academic year.	
Feb. 5–7, 2007	ACG/National SMART Negotiated Rulemaking, First Session http://www.ed.gov/policy/highered/reg/hearulemaking/2007/acg.html	 Negotiators discussed: Rigorous secondary school programs; Mandatory institutional participation; Eligibility of certificate programs for ACGs; Requirement that Pell Grants and ACGs/National SMART Grants be dispersed at the same institution when awarded within the same term; Grade point average Transfer students Course work Timing of calculation Eligibility for disbursement.

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
		Interpretation of previously enrolled for student eligibility
		 College credits earned in high school
		 Treatment of AP/IB courses and credits.
		Majors
		 Additional majors and CIP codes
		 Institutional flexibility in determining majors.
		Clarify successful completion of rigorous secondary school program of study;
		Departmental monitoring disbursements of awards.
March 5-7, 2007	ACG/National SMART Negotiated Rulemaking,	Negotiators discussed:
	Second Session http://www.ed.gov/policy/highered/reg/hearulem	Recognition of rigorous secondary school programs;
	aking/2007/acg.html	Mandatory participation by postsecondary institutions;
		Eligibility of certificate programs for ACGs;
		Requirement that Federal Pell Grants and ACGs or National SMART Grants be disbursed at the same institution;
		Grade Point Average (GPA)—transfer students;
		GPA—course work, timing of calculation, and eligibility for disbursement;
		Academic year progression
		Interpreting prior enrollment—dual- enrollment and early college programs;
		Eligible majors and CIP codes expansion;
		Institutional flexibility in determining timing of student declaration of eligible major;
		Completion of a Rigorous Secondary School Program of Study.
April 16–18, 2007	ACG/National SMART Negotiated Rulemaking, Third Session	
Regularly updated	Information for students and parents.	Provides overview of the programs, outlines eligibility requirements, and lists options for
	http://www.ed.gov/about/offices/list/ope/ac- smart-families.html	meeting the rigorous curriculum requirement.

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
Aug. 7, 2007	Notice of Proposed Rulemaking (NPRM) for the ACG and National SMART Grant programs in the Federal Register (Vol. 72, No. 151). http://www.ed.gov/legislation/FedRegister/proprule/2007-3/080707a.html	The secretary proposed to amend the regulations for the ACG and National SMART Grant programs. The secretary amended these regulations to reduce administrative burden for program participants and to clarify program requirements.
Sept. 6, 2007	Comments on NPRM due to the Department.	
Sept. 24, 2007	Dear Colleague letter (GEN-07-06) from the assistant secretary for postsecondary education, providing a revised list of eligible majors for the 2007–08 academic year. http://www.ifap.ed.gov/dpcletters/ GEN0706.html	Additional eligible majors include Food Science, Food Technology and Processing, Environmental Science, Fishing and Fisheries Sciences and Management, Forest Sciences and Biology, Wood Science and Wood Products/Pulp and Paper Technology, Wildlife and Wildlands Science and Management, Biopsychology, Nutrition Sciences, Physiological Psychology/Psychobiology
Oct. 9, 2007	Dear Colleague letter (GEN-07-06) from the assistant secretary for postsecondary education, on course enrollment requirements for payment in the National SMART Grant program. http://www.ifap.ed.gov/dpcletters/GEN0707.html	An otherwise eligible student can receive a National SMART Grant for a payment period only if the student is enrolled in at least one course that meets the specific requirements of the student's National SMART Grant-eligible major.
Oct. 26, 2007	Press release announcing ACG/National SMART Grant data results from 2006–07 academic year: http://www.ed.gov/news/pressreleases/2007/10/10262007.html Office of Postsecondary Education, Year 1 results by state: http://www.ed.gov/programs/smart/performance.html	The secretary announced the first-year national data results from the ACGs and National SMART Grants. Results show that in the first year, \$233,038,410 in ACGs were awarded to 299,089 students nationwide, and \$195,544,735 in National SMART Grants were awarded to 60,976 students. Also announced was the goal to double the number of students receiving ACGs and National SMART Grants by 2010–11 and to continue to work with states, colleges and high schools to raise awareness about ACGs and National SMART Grants.
Oct. 29, 2007 Effective July 1, 2008. [Institutions that administer the ACG and National SMART Grant programs may, at their discretion, choose to implement these Final Regulations in their entirety, or by section, on or after Nov. 1, 2007.]	Final Regulations published in Federal Register (Vol. 72, No. 208). http://www.ed.gov/legislation/FedRegister/finrule/2007-4/102907a.html	The secretary amends the regulations for the ACG and National SMART Grant programs to reduce administrative burden for program participants and to clarify program requirements.

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
Feb. 6, 2008	Dear Colleague letter (GEN-08-02) from the assistant secretary for postsecondary education, on the list of process of adding eligible majors for 2008–09.	Explains the process by postsecondary institutions can request additional majors to the list of eligible majors for the National SMART Grant Program for the 2008–09 award year.
April 17, 2008	H.R. 5715: Ensuring Continued Access to Student Loans Act of 2008 (ECASLA) passed by House of Representatives	
	http://thomas.loc.gov	
April 30, 2008	ECASLA passed by Senate	
	http://thomas.loc.gov	
May 7, 2008 Effective Jan. 1, 2009	ECASLA signed into law by President Bush http://thomas.loc.gov	 Strikes reference to "academic year" in current law that ties first-, second-, third-, and fourth-year eligibility for, as applicable, ACGs and National SMART Grants to the student's academic year standing. Removes the stipulation that ACG- and National SMART Grant-eligible students
		must be U.S. citizens, and applies the same citizenship criteria as for the Federal Pell Grant program (permitting certain eligible noncitizens to qualify) • Authorizes ACG and National SMART Grant eligibility for students enrolled no less than half-time, and provides for a ratable reduction in the award for a student attending less than full-time in the same manner as for Pell-eligible students who attend on less than a full-time basis.
		Authorizes ACG eligibility for students attending a postsecondary certificate program that is no less than one year in length, or no less than two years in length, at a two- or four-year degree-granting institution.
		 Authorizes an additional \$4,000 National SMART Grant award for the fifth year of a baccalaureate degree program in one of the requisite majors that requires students to complete a full five years of coursework.
		Directs all surplus funds from the programs back into the ACG/National SMART Grant programs.
June 19, 2008	Dear Colleague Letter (GEN-08-09) from the principal deputy assistant secretary, Office of Postsecondary Education, summarizing <i>ECASLA</i> .	
June 20, 2008	Dear Colleague letter (GEN-08-09) from the principal deputy assistant secretary, on the list	The list of eligible academic majors as published in Dear Colleague letter GEN-07-06

APPENDIX B. HISTORY OF THE ACGS/NATIONAL SMART GRANTS

Date Passed or Issued/Date Effective	Legislation, Regulation, or Guidance	Purpose and Key Provisions
	of eligible majors for 2008–09.	carry over unchanged to the 2008–09 award year.
Aug. 14, 2008	H.R. 4137: The Higher Education Opportunity Act of 2008 (HEOA) enacted and reauthorized the Higher Education Act of 1965 (HEA).	 Changes the effective date for all program-related revisions made in H.R. 5715 from Jan. 1, 2009 to July 1, 2009. States given increased control over defining rigorous secondary school programs of study.

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APPENDIX C

High Schools That Work Award of Educational Achievement

To earn this award, students must complete the curriculum recommended by *High Schools That Work (HSTW)* initiative in at least two of the three subject areas (English, mathematics, and science); complete a concentration in a career and technical field, mathematics and science, or the humanities; and meet all three of the performance goals on the HSTW assessment.

The recommended curriculum consists of:

English: four credits in college-preparatory level courses.

Mathematics: four credits in college-preparatory level courses, including algebra I, geometry, algebra II and a higher level mathematics course such as trigonometry, statistics, pre-calculus, calculus, or Advanced Placement mathematics.

Science: three or more credits in science, including at least two credits in college-preparatory biology, chemistry, anatomy and physiology or physics and applied physics.

The concentrations consist of

Career and Technical: four or more credits in a coherent sequence in a career and technical field or major.

Mathematics and Science: four college-preparatory courses each in mathematics and science. At least one higher level course in either mathematics or science must be at the Advanced Placement level.

Humanities: four college-preparatory courses each in English or language arts and social studies and four courses in an area of the humanities, such as foreign language, fine arts or additional English and social studies courses. At least one course in either English or social studies must be at the Advanced Placement level.

$\begin{array}{c} \texttt{APPENDIX} \ \ \texttt{C.} \ \textit{HIGH SCHOOLS THAT WORK} \ \ \texttt{AWARD OF EDUCATIONAL} \\ & \texttt{ACHIEVEMENT} \end{array}$

Performance Goals:

The performance goals on the HSTW assessment are a 279 in reading, a 297 in mathematics, and a 299 in science on a scale of 0-500.

National Data Sources

Survey Data

The data sources used for the analyses of national data are described briefly here. Additional details, such as sample size, sample design, and survey methodology, are available for each of these sources on the NCES Web site (http://nces.ed.gov/surveys/).

The *National Assessment of Educational Progress (NAEP) High School Transcript Studies (HSTS)* periodically collects information on courses, credits, and grades that high school graduates earned in high school. This analysis uses data from 1990, 2000, and 2005 studies.

The *Educational Longitudinal Study (ELS)* is a longitudinal study of high school students who were in 10th grade in 2002. These students were followed up in 2004 (when most graduated from high school) and again in 2006. High school transcripts were collected in 2004.

For both NAEP and ELS, the analysis sample for this study includes high school graduates who received a regular, regents, or honors diploma and had a complete transcript (defined as one that records at least 16 credits and at least 1 credit in English). These selection criteria are intended to exclude implausible transcripts because having fewer than 16 credits and having zero English credits has been shown to indicate that the transcript is faulty. About 99 percent of high school graduates had full transcripts available for the analysis.

The *National Postsecondary Student Aid Studies (NPSAS)* are nationally representative, cross-sectional studies of students enrolled in postsecondary education, regardless of age or level. These studies have been conducted every three to four years since 1990, most recently in 2003–04.

The *Beginning Postsecondary Student Longitudinal Studies (BPS:96/01 and BPS:04/06)* follow cohorts of students who enrolled in postsecondary education for the first time in 1995–96 or 2003–04. The first cohort (1995–96) was followed up in 1998 and 2001, and the second cohort (2003–04) in 2006. The students in these studies are drawn from NPSAS and the base-year NPSAS data.

The *Integrated Postsecondary Education Data System (IPEDS)* collects data every year from all primary providers of postsecondary education in the country on topics such as enrollments, program completions, graduation rates, faculty, staff, finances, institutional prices, and student financial aid.

ACG and National SMART Grant Data

The Office of Federal Student Aid provided MPR Associates with a file of student-level records of all Pell Grant recipients (merged with information from the Free Application for Federal Student Aid application [FAFSA] data), ACGs, and National SMART Grants awarded for the 2006–07 academic year. There were approximately 5 million students in the file who had received a Pell Grant at one of the institutions eligible to participate in the ACG or the National SMART Grant programs. The Pell Grant records (with the FAFSA data) were then merged with the records for ACG and National SMART Grant recipients. The final analysis file identified those who received an ACG, a National SMART Grant, or only a Pell Grant. Only those records that indicated that the award had been disbursed to the student (as of the September 2007 date of the file) were included. Subsequent updates to the file (either adding disbursements or subtracting cancellations) may have changed the totals compared with those reported elsewhere.

Although all ACGs and National SMART Grants are only awarded to students with Pell Grants, about 400 ACG or National SMART Grant records could not be matched to a Pell Grant record in this file. In addition, some of the student-reported fields from the FAFSA were missing, so the student totals may vary slightly for some variables reported on different tables. There were about 2,000 ACG or National SMART Grant recipients who transferred during the academic year and received these grants at two different colleges; the tables that show the number of students by type or state of institution include these as duplicates, and will therefore have slightly higher totals than the tables based on unduplicated, unique student records. About 1,600 students received an ACG in the first term (as a second-year student) and a National SMART Grant in the second term (as a third-year student). They are shown in both the ACG and the National SMART Grant totals.

APPENDIX E

Supplemental Tables on ACG and National SMART Grant Program Participation by Institution Type in 2006–07

Table E-1. Participation of eligible institutions in ACG and SMART Grant programs: 2006–07

		Nun	Number of institutions	ons		Numb	er of Pell Grar	Number of Pell Grants in these institutions	rtions
				Number	Percent				Percent of
		Number	Percent	partici-	partici-		Pell Grants	Pell Grants in	Pell Grants
		partici-	partici-	pating in	pating in	Total Pell	in partici-	nonpartici-	in partici-
	Total	pating	pating	SMART	SMART	Grant	pating	pating	pating
Type of institution	number	in ACG	in ACG	Grant	Grant	number	colleges	colleges	colleges
Colleges eligible for ACG	3,557	2,772	6'22	1,420	39.9	4,929,449	4,463,605	465,844	90.5
SMART Grant	2,074	1,739	83.8	1,425	68.7	2,821,260	2,475,539	345,721	87.7
Colleges eligible for									
ACG or SMART Grant	3,562	2,772	83.8	1,425	68.7	4,933,498	4,510,929	422,569	91.4
Colleges eligible for ACG only	>								
Total	1,488	1,033	69.4	l	I	2,112,238	1,789,440	322,798	84.7
Public two-year	1,000	871	87.1	I	I	1,748,828	1,658,316	90,512	94.8
Private nonprofit two-year	92	40	42.1	I	I	22,335	14,331	8,004	64.2
For-profit two-year	374	104	27.8	I	I	304,178	84,166	220,012	27.7
Four-year*	19	18	94.7	I		36,897	32,627	4,270	88.4
Colleges eligible for ACG or SMABT Grant	MART Gran								
	207	7	0 00	107	700	0001 000	0 475 500	245 724	7 70
l Otal	4,0,4	1,739	00.00	0,4,1	7.00	2,021,200	6,470,008	040,721	/: /0
Public four-year	593	222	93.6	520	87.7	1,606,175	1,510,061	96,114	94.0
Private nonprofit four-year	1,271	1,053	82.8	820	64.5	738,267	634,528	103,739	85.9
For-profit four-year	210	131	62.4	85	40.5	476,818	330,950	145,868	69.4

[—] Not applicable.

NOTE: This table includes duplicate records for students who received grants at more than one college in 2006-07. Participating colleges are those that had at least one ACG or SMART Grant disbursed. Institutions with multiple branches are counted separately when the information was reported by the campus. Many community college systems and for-profit institutions with multiple campus locations did not provide information at the campus level. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level, but included in the totals.

^{*} Associate degree colleges that only offer bachelor's degrees in a few fields.

Number and percentage of Pell Grant students receiving ACGs or SMART Grants at participating colleges: 2006-07 Table E-2.

	-							(7	ACG or SMART	MART
	Pell	Pell Grant recipients	ents	AC	ACG recipients	S	SMAR	SMART Grant recipients	pients	Grant recipients	pients
					4	As percent of first-		*	As percent of third-		
		First- and	Third- and		As per-	and		As per-	and		As per-
		-puopes	fourth-		cent of	-puooes		cent of	fourth-		cent of
Type of	Total	year	year	Total	all Pell	year Pell	Total	all Pell	year Pell	Total	all Pell
participating institution	number	students	students	number	Grants	Grants	number	Grants	Grants	number	Grants
Colleges participating in ACC	4 463 605 3 009	3 000 883	1 253 636	301 686	α	10.0	61 930	4	0.4	363 616	α
Colleges participating in)	0,00)) 	9	2)) -)	=	2	5	- 5
SMART Grant	2,475,539 1,263	1,263,376	3,376 1,208,054	252,756	10.2	20.0	62,371	2.5	5.2	315,127	12.7
Colleges participating in											
ACG or SMART Grant	4,510,929 3,040	3,040,187	1,270,577	301,686	6.7	6.6	62,371	<u>4</u> .	4.9	364,057	8.1
Colleges participating in ACG only	inly										
Total	2,035,390 1,776,811	1,776,811	62,523	48,930	2.4	2.8	l	l	l	48,930	2.4
Public two-year	1,658,316 1,465	1,465,306	l	36,104	2.2	2.5	I	I	l	36,104	2.2
Private nonprofit two-year	14,331	13,616	l	1,106	7.7	8.1	I	I	I	1,106	7.7
For-profit two-year	84,166	82,351	I	1,081	1.3	1.3	I	I	I	1,081	1.3
Four-year*	278,577	215,538	62,523	10,639	3.8	4.9	I	I	l	10,639	3.8
Colleges participating in ACG or SMART Grant	r SMART Gra	,									
	יייייייייייייייייייייייייייייייייייייי	ò		1	0	0	1000	(ı	1	1
Total	2,475,539 1,263	1,263,376	1,208,054	252,756	10.2	20.0	62,371	2.5	5.5	315,127	12.7
Public four-year	1,510,061	676,304	830,865	174,322	11.5	25.8	42,191	2.8	5.1	216,513	14.3
Private nonprofit four-year	634,528	327,376	306,525	76,426	12.0	23.3	16,271	2.6	5.3	92,697	14.6
For-profit four-year	330,950	259,696	70,664	2,008	9.0	8.0	3,909	1.2	5.5	5,917	<u>6</u> .

— Not applicable.

* Associate degree colleges that only offer bachelor's degrees in a few fields.

Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded systems and for-profit institutions with multiple campus locations did not provide information at the campus level. Class level is institution-reported for ACGs and SMART NOTE: This table includes duplicate records for students who received grants at more than one college in 2006–07. Participating colleges are those that had at least one ACG or SMART Grant disbursed. Institutions with multiple branches are counted separately when the information was reported by the campus. Many community college from the numbers presented by class level, but included in the totals.

Table E-3. Average number of Pell Grants, ACGs, or SMART Grants at participating institutions: 2006-07

	•	•			ACGs or
Pell				_	SMART
Grants	Pell Grants	Pell Grants	ACGs	Grants	Grants
1,610	1,086	452	109	22	131
1,737	887	848	177	44	221
1,606	1,082	452	107	22	130
only					
1,471	1,284	45	35	_	35
1,904	1,682	_	41	_	41
358	340	_	28	_	28
809	792	_	10	_	10
3,761	3,062	691	118	_	118
1,737	887	848	177	44	221
2,904	1,301	1,598	335	81	416
774	399	374	93	20	113
3,894	3,055	831	24	46	70
	1,610 1,737 1,606 only 1,471 1,904 358 809 3,761 1,737 2,904 774	Pell students with Pell Grants 1,610 1,086 1,737 887 1,606 1,082 only 1,471 1,284 1,904 1,682 358 340 809 792 3,761 3,062 1,737 887 2,904 1,301 774 399	Total Pell Students with Grants second-year students with Pell Grants fourth-year students with Pell Grants 1,610 1,086 452 1,737 887 848 1,606 1,082 452 1,471 1,284 45 1,904 1,682 — 358 340 — 809 792 — 3,761 3,062 691 1,737 887 848 2,904 1,301 1,598 774 399 374	Total second-year Pell students with Grants fourth-year students with Students with Pell Grants ACGs 1,610 1,086 452 109 1,737 887 848 177 1,606 1,082 452 107 1,471 1,284 45 35 1,904 1,682 — 41 358 340 — 28 809 792 — 10 3,761 3,062 691 118 1,737 887 848 177 2,904 1,301 1,598 335 774 399 374 93	Total second-year Pell students with Grants students with Students with Pell Grants SMART ACGS Grants 1,610 1,086 452 109 22 1,737 887 848 177 44 1,606 1,082 452 107 22 onlly 1,471 1,284 45 35 — 1,904 1,682 — 41 — 358 340 — 28 — 809 792 — 10 — 3,761 3,062 691 118 — 1,737 887 848 177 44 2,904 1,301 1,598 335 81 774 399 374 93 20

⁻ Not applicable.

NOTE: This table includes duplicate records for students who received grants at more than one college in 2006–07. Participating colleges are those that had at least one ACG or SMART grant disbursed. Institutions with multiple branches are counted separately when the information was reported by the campus. Many community college systems and for-profit institutions with multiple campus locations did not provide information at the campus level. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level, but included in the totals.

^{*} Associate degree colleges that only offer bachelor's degrees in a few fields.

Number and percentage distribution of colleges participating in ACG or SMART Grant programs by the number of grant recipients: 2006–07 Table E-4.

			Number of	Number of ACG recipients in the college	in the college			Total
Type of		:					More than	colleges
institution	1–10	11–50	51–100	101–200	201–500	501–1,000	1,000	with ACGs
Number of ACG-participating colleges by number of	olleges by nur		ACGs in the college					
Total	909	925	515	342	263	86	35	2,772
Public two-year	270	396	124	26	21	4	I	871
Private nonprofit two-year	18	16	က	က	I	1	I	40
For-profit two-year	92	24	က	_	I	I	I	104
Public four-year	25	73	74	103	188	02	35	568
Private nonprofit four-year	141	370	300	178	53	12	I	1,054
For-profit four-year	9/	46	7	~	~	I	I	135
Percentage distribution of ACG-participating college	3-participating	colleges by numl	s by number of ACGs in the college	e college				
Total	21.9	33.4	18.6	12.3	9.5	3.1	1.3	100.0
Public two-year	31.0	45.5	14.2	6.4	2.4	0.5	I	100.0
Private nonprofit two-year	45.0	40.0	7.5	7.5	I	I	I	100.0
For-profit two-year	73.1	23.1	2.9	1.0	I	I	I	100.0
Public four-year	4.4	12.9	13.0	18.1	33.1	12.3	6.2	100.0
Private nonprofit four-year	13.4	35.1	28.5	16.9	5.0	1.	I	100.0
For-profit four-year	56.3	34.1	8.1	0.7	0.7	l	l	100.0
-								

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Number and percentage distribution of colleges participating in ACG or SMART Grant programs by the number of grant recipients: 2006-07-Continued Table E-4.

			Number of SMA	Number of SMART Grant recipients in the college	ents in the colleg	е		Total
		;					More than	colleges with
	1–10	11–50	51–100	101–200	201–500	501-1,000	1,000	SMARI Grants
Number of SMART Grant-participating colleges by	pating college		number of SMART Grants in the college	n the college				
	539	595	148	83	47	7	2	1,425
Public four-year	78	212	107	70	44	o	0	520
Private nonprofit four-year	427	339	38	12	2	~	_	820
For-profit four-year	34	4	က	~	~	~	~	85
Percentage distribution of SMART Grant-participating colleges by number of SMART Grants in the college	रT Grant-part	cipating college:	s by number of SI	MART Grants in	the college			
	37.8	41.8	10.4	5.8	3.3	8.0	0.1	100.0
Public four-year	15.0	40.8	20.6	13.5	8.5	1.7	0.0	100.0
Private nonprofit four-year	52.1	41.3	4.6	1.5	0.2	0.1	0.1	100.0
For-profit four-year	40.0	51.8	3.5	1.2	1.2	1.2	1.2	100.0

— Not applicable.

Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level, but included in the totals. Detail may not sum to totals because of rounding. ACG or SMART Grant disbursed. Institutions with multiple branches are counted separately when the information was reported by the campus. Many community college NOTE: This table includes duplicate records for students who received grants at more than one college in 2006–07. Participating colleges are those that had at least one systems and for-profit institutions with multiple campus locations did not provide information at the campus level. Class level is institution-reported for ACGs and SMART

Table E-5. Number and percentage distribution of colleges participating in ACG or SMART Grant programs by the percentage of Pell Grant recipients who also received ACGs or SMART Grants: 2006-07

Type of		Percent	of all Pell Grant	Students with AC	Percent of all Pell Grant students with ACGs or SMART Grants	rants		Total colleges with ACGs or
institution	Less than 2%	2–4.9%	2-9.9%	10–19.9%	20–29.9%	30–39.9%	40% or more	SMART Grants
Number of ACG- or SMART Grant-participating colleges by percent of all Pell Grant students receiving ACGs or SMART Grants	Grant-participating	colleges by perce	ent of all Pell Gr	ant students rec	eiving ACGs or §	SMART Grants		
Total		471	457	527	327	166	8	2,806
Public two-year	514	221	111	21	0	_	2	870
Private nonprofit two-year	∞	7	S.	80	က	9	က	40
For-profit two-year	72	17	10	4	~	0	0	104
Public four-year	38	61	121	226	115	12	2	575
Private nonprofit four-year	69	117	196	263	204	147	74	1,070
For-profit four-year	92	48	4	5	4	0	0	147
Percentage distribution of ACG- or SMART Grant-participating colleges by percent of all Pell Grant students receiving ACGs or SMART Grants	3G- or SMART Gra	nt-participating co	elleges by perce	int of all Pell Gra	int students rece	iving ACGs or §	SMART Grants	
Total	27.7	16.8	16.3	18.8	11.7	5.9	2.9	100.0
Public two-year	59.1	25.4	12.8	2.4	0.0	0.1	0.2	100.0
Private nonprofit two-year	20.0	17.5	12.5	20.0	7.5	15.0	7.5	100.0
For-profit two-year	69.2	16.3	9.6	3.8	1.0	0.0	0.0	100.0
Public four-year	9.9	10.6	21.0	39.3	20.0	2.1	0.3	100.0
Private nonprofit four-year	6.4	10.9	18.3	24.6	19.1	13.7	6.9	100.0
For-profit four-year	51.7	32.7	9.5	3.4	2.7	0.0	0.0	100.0
Type of		Percento	f first- and seco	nd-vear Pell Gra	Percent of first- and second-vear Pell Grant students with ACGs	ACGs		Total colleges
institution	Less than 2%	2–4.9%	2-9.9%	10–19.9%	20–29.9%	30–39.9%	40% or more	with ACGs
Number of ACG-participating colleges by percent of first- and second-year Pell Grant students receiving ACGs	colleges by perce	nt of first- and sec	cond-vear Pell (Grant students re	ceiving ACGs			
Total	717	395	313	365	251	224	202	2,769
Public two-year	485	232	118	32	0	~	2	870
Private nonprofit two-vear	7	∞	4	တ	2	7	က	40
	, .	' '	' '	. '	'	. 1		

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40 104 567 1,054 134

> 123 378

0 94 122

99

111 155

29 39 83

Private nonprofit four-year

For-profit two-year Public four-year For-profit four-year

Number and percentage distribution of colleges participating in ACG or SMART Grant programs by the percentage of Pell Grant recipients who also received ACGs or SMART Grants: 2006-07-Continued Table E-5.

Type of		Percent of	f first- and seco	nd-year Pell Gra	Percent of first- and second-year Pell Grant students with ACGs	ACGs		Total colleges
institution	Less than 2%	2–4.9%	2-9.9%	10–19.9%	20–29.9%	30–39.9%	40% or more	with ACGs
Percentage distribution of ACG-participating colleges by percent of first- and second-year Pell Grant students receiving ACGs	CG-participating co	lleges by percent	of first- and sec	ond-year Pell G	rant students rec	seiving ACGs		
Total	25.8	14.3	11.3	13.2	9.1	8.1	18.3	100.0
Public two-year	22.7	26.7	13.6	3.7	I	0.1	0.2	100.0
Private nonprofit two-year	17.5	20.0	10.0	22.5	5.0	17.5	7.5	100.0
For-profit two-year		17.3	9.6	3.8	1.0	1	I	100.0
Public four-year	5.1	8.6	9.7	20.8	17.5	16.6	21.7	100.0
Private nonprofit four-year	3.7	5.5	10.5	18.9	13.9	11.6	35.9	100.0
For-profit four-year	61.9	22.4	11.2	2.2	1.5	I	0.7	100.0
Type of		Percent of thir	d- and fourth-ye	ear Pell Grant stu	Percent of third- and fourth-year Pell Grant students with SMART Grants	RT Grants		Total colleges with SMART
institution	Less than 2%	2–4.9%	2-9.9%	10–19.9%	20–29.9%	30–39.9%	40% or more	Grants
Number of SMART Grant-participating colleges by percent of third- and fourth-year Pell Grant students receiving SMART Grants	articipating colleges	by percent of thir	d- and fourth-ye	ear Pell Grant stu	udents receiving	SMART Grants		
Total	304	545	343	174	36	4	6	1,425
Public four-year	105	241	121	46	4	2	~	520
Private nonprofit four-year	. 181	285	212	109	22	7	4	820
For-profit four-year	18	19	10	19	10	2	4	85
Percentage distribution of SMART Grant-participatir	MART Grant-partici	Ď	y percent of thir	d- and fourth-yea	colleges by percent of third- and fourth-year Pell Grant students receiving SMART Grants	dents receiving	SMART Grants	
Total	21.3		24.1	12.2	2.5	1.0	9.0	100.0
Public four-year	20.2	46.3	23.3	8.8	0.8	0.4	0.2	100.0
Private nonprofit four-year	. 22.1	34.8	25.9	13.3	2.7	6.0	0.5	100.0
For-profit four-year	21.2	22.4	11.8	22.4	11.8	5.9	4.7	100.0
oldocilado tola								

— Not applicable.

Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions were excluded NOTE: This table includes duplicate records for students who received grants at more than one college in 2006–07. Participating colleges are those that had at least one ACG or SMART Grant disbursed. Institutions with multiple branches are counted separately when the information was reported by the campus. Many community college systems and for-profit institutions with multiple campus locations did not provide information at the campus level. Class level is institution-reported for ACGs and SMART from the numbers presented by class level, but included in the totals. Detail may not sum to totals because of rounding.

Table E-6. Number and percentage distribution of ACGs and total Pell Grants by class level and type of institution, and percentage of first- and second-year Pell Grant recipients receiving ACGs: 2006–07

	First-time,			Total first-
Type of institution	first-year	Other first-year	Second-year	and second-year
Number of ACGs				
Total ACGs	130,645	100,318	68,738	299,701
Public four-year	71,737	66,273	39,980	177,990
Private nonprofit four-year	37,224	21,605	22,344	81,173
For-profit four-year	1,697	532	474	2,703
Public two-year	18,655	11,474	5,533	35,662
Private nonprofit two-year	635	261	203	1,099
For-profit two-year	697	173	204	1,074
Total Pell Grant-only recipients	887,865	815,769	968,874	2,672,508
Number of Pell Grants				
Total Pell Grants	1,018,510	916,087	1,037,612	2,972,209
Public four-year	240,520	186,873	320,417	747,810
Private nonprofit four-year	126,839	88,335	150,920	366,094
For-profit four-year	127,476	126,664	75,272	329,412
Public two-year	485,474	477,488	472,126	1,435,088
Private nonprofit two-year	4,450	4,712	4,132	13,294
For-profit two-year	33,751	32,015	14,745	80,511
Percentage distribution of gran	nte			
Total ACGs	43.6	33.5	22.9	100.0
Public four-year	40.3	37.2	22.5	100.0
Private nonprofit four-year	45.9	26.6	27.5	100.0
For-profit four-year	62.8	19.7	17.5	100.0
Public two-year	52.3	32.2	15.5	100.0
Private nonprofit two-year	57.8	23.7	18.5	100.0
For-profit two-year	64.9	16.1	19.0	100.0
Total Pell Grant-only recipients	33.2	30.5	36.3	100.0
Total Pell Grants	34.3	30.8	34.9	100.0
ACGs as percent of Pell Grants	•			
Total ACGs	12.8	11.0	6.6	10.1
Public four-year	29.8	35.5	12.5	23.8
Private nonprofit four-year	29.3	24.5	14.8	22.2
For-profit four-year	1.3	0.4	0.6	0.8
Public two-year	3.8	2.4	1.2	2.5
Private nonprofit two-year	14.3	5.5	4.9	8.3
For-profit two-year	2.1	0.5	1.4	1.3

NOTE: This table includes duplicate records for students who received grants at more than one college in 2006–07. Participating colleges are those that had at least one ACG or SMART Grant disbursed. Institutions with multiple branches are counted separately when the information was reported by the campus. Many community college systems and for-profit institutions with multiple campus locations did not provide information at the campus level. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level, but included in the totals. Detail may not sum to totals because of rounding.

Table E-7. Number and percentage distribution of SMART Grants and total Pell Grants by class level and type of institution, and percentage of third- and fourth-year Pell Grant recipients receiving SMART Grants: 2006–07

			Total third-
Type of institution	Third-year	Fourth-year	and fourth-year
Number of grants			
Total SMART Grants	29,755	32,575	62,330
Public four-year	19,664	22,492	42,156
Private nonprofit four-year	7,798	8,467	16,265
For-profit four-year	2,293	1,616	3,909
Total Pell Grant-only recipients	602,090	603,019	1,205,109
Total Pell Grants	631,845	635,594	1,267,439
Public four-year	410,223	443,955	854,178
Private nonprofit four-year	169,190	165,540	334,730
For-profit four-year	52,432	26,099	78,531
Percentage distribution of grants			
Total SMART Grants	47.7	52.3	100.0
Public four-year	46.6	53.4	100.0
Private nonprofit four-year	47.9	52.1	100.0
For-profit four-year	58.7	41.3	100.0
Total Pell Grant-only recipients	50.0	50.0	100.0
Total Pell Grant recipients	49.9	50.1	100.0
SMART Grants as percent of Pell Grants			
Total SMART Grants	4.7	5.1	4.9
Public four-year	4.8	5.1	4.9
Private nonprofit four-year	4.6	5.1	4.9
For-profit four-year	4.4	6.2	5.0

NOTE: This table includes duplicate records for students who received grants at more than one college in 2006–07. Participating colleges are those that had at least one ACG or SMART Grant disbursed. Institutions with multiple branches are counted separately when the information was reported by the campus. Many community college systems and for-profit institutions with multiple campus locations did not provide information at the campus level. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level, but included in the totals. Detail may not sum to totals because of rounding.

Table E-8. Number and percentage distribution of ACG, SMART Grant, and Pell Grant recipients by class level, gender, citizenship, and age and percentage of ACG and SMART Grant recipients as a percentage of total Pell Grants: 2006–07

	Ge	nder	Citize	nship		Age	
				Eligible	18 or		24 or
Class level	Male	Female	U.S. citizen	non-citizen	younger	19–23	older
Number of grants							
First- and second-ye	ar students						
ACG recipients	111,999	184,090	299,701	0	163,038	136,108	433
Pell Grant-only							
recipients	879,943	1,763,632	2,451,627	216,039	307,421	1,108,890	1,256,113
Total Pell Grant							
recipients	991,942	1,947,722	2,751,328	216,039	470,459	1,244,998	1,256,546
Third- and fourth-yea	ar students						
SMART Grant							
recipients	36,197	25,962	62,330	0	282	41,670	20,351
Pell Grant-only							
recipients	457,765	741,208	1,116,588	76,756	1,052	596,109	607,939
Total Pell Grant							
recipients	493,962	767,170	1,178,918	76,756	1,334	637,779	628,290
Percentage distribu	ıtion of gran	ts					
First- and second-ye	ar students						
ACG recipients	37.8	62.2	100.0	0.0	54.4	45.4	0.1
Pell Grant-only							
recipients	33.3	66.7	91.9	8.1	11.5	41.5	47.0
Total Pell Grant							
recipients	33.7	66.3	92.7	7.3	15.8	41.9	42.3
Third- and fourth-yea	ar students						
SMART Grant							
recipients	58.2	41.8	100.0	0.0	0.5	66.9	32.7
Pell Grant-only							
recipients	38.2	61.8	93.6	6.4	0.1	49.5	50.4
Total Pell Grant							
recipients	39.2	60.8	93.9	6.1	0.1	50.3	49.6
ACGs and SMART (
percent of Pell G							
First- and second-ye	ar students						
ACGs as percent	44.0	0.5	40.0	0.0	04.7	40.0	0.0
of Pell Grants	11.3	9.5	10.9	0.0	34.7	10.9	0.0
Third- and fourth-yea	ar students						
SMART Grants							
as percent of Pell Grants	7.3	3.4	5.3	0.0	21.1	6.5	3.2
or Foll Grants	1.5	J. 1	5.5		41.1	0.5	J.Z

NOTE: This table is based on unduplicated records. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level, but included in the totals. Missing values are excluded, so there will be small differences in the totals for gender, citizenship, age, dependency, income, and EFC. Detail may not sum to totals because of rounding.

Table E-9. Number and percentage distribution of ACG, SMART Grant, and Pell Grant recipients by class level, dependency and parental income of dependent students, and percentage of ACG and SMART Grant recipients as a percentage of total Pell Grants: 2006–07

	Depen	dency	Income of de	ependent stude	ents' parents
	Inde-	_	Less than	\$15,000-	More than
Class level	pendent	Dependent	\$15,000	30,000	\$30,000
Number of grants					
First- and second-year students					
ACG recipients	12,049	287,533	84,029	98,994	104,482
Pell Grant-only recipients	1,587,333	1,085,175	436,811	375,714	272,614
Total Pell Grant recipients	1,599,382	1,372,708	520,840	474,708	377,096
Third- and fourth-year students					
SMART Grant recipients	25,333	36,971	11,639	12,103	13,226
Pell Grant-only recipients	703,848	501,261	175,347	172,064	153,816
Pell Grant recipients	729,181	538,232	186,986	184,167	167,042
Percentage distribution of grants					
First- and second-year students					
ACG recipients	4.0	96.0	29.2	34.4	36.3
Pell Grant-only recipients	59.4	40.6	40.3	34.6	25.1
Total Pell Grant recipients	53.8	46.2	37.9	34.6	27.5
Third- and fourth-year students					
SMART Grant recipients	40.7	59.3	31.5	32.7	35.8
Pell Grant-only recipients	58.4	41.6	35.0	34.3	30.7
Total Pell Grant recipients	57.5	42.5	34.7	34.2	31.0
ACGs and SMART Grants as percent					
of Pell Grants					
First- and second-year students					
ACGs as percent of Pell Grants	0.8	20.9	16.1	20.9	27.7
Third- and fourth-year students					
SMART Grants as percent of Pell Grants	3.5	6.9	6.2	6.6	7.9

NOTE: This table is based on unduplicated records. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level, but included in the totals. Missing values are excluded, so there will be small differences in the totals for gender, citizenship, age, dependency, income, and EFC. Detail may not sum to totals because of rounding.

Number and percentage distribution of ACG, SMART Grant, and Pell Grant recipients by class level, dependency, and Expected Family Contribution (EFC), and percentage of ACG and SMART Grant recipients as a percentage of total Pell Grants: 2006–07 Table E-10.

		EFC of de	EFC of dependent students	udents			EFC of inc	EFC of independent students	students	
			1,000–	2,000–	3,000			1,000–	2,000–	3,000
Class level	Zero	1–999	1,999	2,999	or more	Zero	1–999	1,999	2,999	or more
Number of grants First- and second-year students										
ACG recipients	96,163	63,144	48,782	45,273	34,171	9,621	1,154	089	404	190
Pell Grant-only recipients	527,816	213,809	139,737	120,101	83,712	981,919	215,736	192,442	127,467	69,769
Total Pell Grant recipients	623,979	276,953	188,519	165,374	117,883	991,540	216,890	193,122	127,871	69,959
Third- and fourth-year students	000	0	0	0 7 7	0 0	0,7	2	60,000	7	7 7 2 6
Single Grant-only recipients	181,221	9,223	0,203	72,108	4,002 56,506	385.071	104.397	3,420 94,649	73.438	1,720
Total Pell Grant recipients	191,857	125,935	80,919	78,153	61,368	398,498	108,416	98,069	76,179	48,019
Percentage distribution of grants										
First- and second-year students ACG recipients	33.4	22.0	17.0	15.7	11.9	79.8	9.6	5.6	3.4	1.6
Pell Grant-only recipients	48.6		12.9	1.1	7.7	61.9	13.6	12.1	8.0	4.4
Total Pell Grant recipients	45.5	20.2	13.7	12.0	9.8	62.0	13.6	12.1	8.0	4.4
Third- and fourth-year students										
SMART Grant recipients	28.8		16.8	16.4	13.2	53.0	15.9	13.5	10.8	8.9
Pell Grant-only recipients	36.2	23.3	14.9	14.4	11.3	54.7	14.8	13.4	10.4	9.9
Total Pell Grant recipients	35.6	23.4	15.0	14.5	11.4	54.7	14.9	13.4	10.4	9.9
ACGs and SMART Grants as										
First- and second-vear students										
ACGs as percent of Pell Grants	15.4	22.8	25.9	27.4	29.0	1.0	0.5	0.4	0.3	0.3
Third- and fourth-year students										
SMART Grants as percent										
of Pell Grants	5.2	7.3	7.7	7.7	7.9	3.4	3.7	3.5	3.6	3.6

Ended is based on unduplicated records. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level, but included in the (for dependent students) should be available to help pay for their education. The EFC is used as an index number and is used to determine Pell Grant amount. Missing values are excluded, so there will be small differences in the totals for gender, citizenship, age, dependency, income, and EFC. Detail may not sum to totals because of totals. The federal Expected Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources

Table E-11. Average amounts of Expected Family Contribution (EFC), income of dependent students' parents, Pell Grant, ACG, SMART Grant, and combined total grants of ACG, SMART Grant, and Pell Grant recipients, by class level: 2006–07

	EFC of inde-pendent	EFC of depen- dent	Income of dependent students'	Pell Grant	ACG/ SMART Grant	Combined total grant
Class level	students	students	parents	amount	amount	amount
First- and second-year students ACG recipients Pell Grant-only recipients	261 596	1,140 802	24,708 20,071	2,782 2,334	791 —	3,573 2,334
Third- and fourth-year students						
SMART Grant recipients	780	1,205	24,205	2,871	3,251	6,122
Pell Grant-only recipients	757	1,048	22,330	2,610	_	2,610

⁻ Not applicable.

NOTE: This table is based on unduplicated records. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level, but included in the totals. The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. The EFC is used as an index number and is used to determine the Pell Grant amount. Missing values are excluded, so there will be small differences in the totals for gender, citizenship, age, dependency, income, and EFC.

Number of grants, total dollar amounts, and average grant amounts awarded to dependent students with ACGs or SMART Grants, by Expected Family Contribution (EFC) of the students: 2006–07 Table E-12.

					ACGs					
EFC	Number of ACGs	Total Pell Grant amount	Total ACG amount	Combined total Pell Grant and ACG amount	Percent of total Pell Grant amount	Percent of total ACG amount	Percent of combined total Pell Grant and ACG amount	Average Pell Grant amount	Average ACG amount	Average combined amount
Total dependent students	289,451	796,448,798	229,553,917	1,026,002,715	100.0	100.0	100.0	2,754	793	3,547
Zero 1-000	96,709	367,821,780	73,799,383	441,621,163	46.2	32.1	43.0	3,807	763	4,570
1,000–1,999	49,162	119,031,968	39,389,860	158,421,828	14.9	17.2	15.4	2,423	801	4,273 3,225
2,000–2,999 3,000 or more	45,587 34,402	67,589,830 21,727,410	36,959,264 28,017,392	104,549,094 49,744,802	8.5	16.1	10.2 4.8	1,484 632	811	2,295 1,447
				S	SMART Grants	(0				
EFC	Number of SMART Grants	Total Pell Grant amount	Total SMART Grant amount	Combined total Pell Grant and SMART Grant	Percent of total Pell Grant amount	Percent of total SMART Grant amount	Percent of combined total Pell Grant and SMART Grant amount	Average Pell Grant amount	Average SMART Grant amount	Average combined amount
Total dependent students	36,997	101,808,321	122,539,597	224,347,918	100.0	100.0	100.0	2,752	3,312	6,064
Zero	10,647	41,550,903	34,489,744	76,040,647	40.8	28.1	33.9	3,903	3,239	7,142
1–999	9,226	32,790,529	30,731,172	63,521,701	32.2	25.1	28.3	3,554	3,331	6,885
1,000–1,999	6,210	15,325,576	20,879,550	36,205,126	15.1	17.0	16.1	2,468	3,362	5,830
2,000–2,999	6,050	9,070,497	20,202,689	29,273,186	0. c	16.5	13.0	1,500	3,339	4,839
3,000 Of Mole 4,864 3,070,616 10,236,442 19,307,236 3.0 13.2 6.0 631 3,336 NOTE: The federal Expected Eamily Contribution (FEC) is a measure of a family's financial strength and indicates how much of a student's and family's financial	4,004 Family Contri	S,U7U,S ID	10,230,442 measure of a far	19,307,236	5.0 ibai bad ibai	13.2	o.o	ool	3,336	0,8,0

NOTE: The federal Expected Family Contribution (EFC) is a measure of a family's financial strength and indicates how much of a student's and family's financial resources (for dependent students) should be available to help pay for their education. The EFC is used an an index number and is used to determine the Pell Grant amount. SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

Table E-13. Number and percentage distribution of SMART Grant recipients by field of study and type of institution attended: 2006-07

					Field	Field of study			
		<u>i</u>		Computer	Physical			Multi- disciplinary	Foreign
Type of institution	Total	sciences	Engineering	science	sciences	Mathematics	Technology	studies	language
Number of grants									
Total	62,371	23,771	13,199	9,787	6,046	4,217	3,045	1,697	609
Public four-year	42,191	17,074	10,054	4,201	4,442	2,947	2,162	896	343
Private nonprofit four-year	16,271	6,689	3,118	2,310	1,603	1,270	286	729	266
For-profit four-year	3,909	80	27	3,276	~	0	265	0	0
Percentage distribution of grants within type of ins	nts within type	of institution							
Total	100.0		21.2	15.7	9.7	8.9	4.9	2.7	1.0
Public four-year	100.0	40.5	23.8	10.0	10.5	7.0	5.1	2.3	0.8
Private nonprofit four-year	100.0	41.1	19.2	14.2	6.6	7.8	1.8	4.5	1.6
For-profit four-year	100.0	0.2	0.7	83.8	0.0	0.0	15.3	0.0	0.0
Percentage distribution of grants by type of institut	nts by type of ir	stitution							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Public four-year	9'29	71.8	76.2	42.9	73.5	6.69	71.0	57.0	56.3
Private nonprofit four-year	26.1	28.1	23.6	23.6	26.5	30.1	9.4	43.0	43.7
For-profit four-year	6.3	0.0	0.2	33.5	0.0	0.0	19.6	0.0	0.0

NOTE: Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

APPENDIX F

Supplemental Tables on High School Course Work

Table F-1. Percentage of high school graduates who completed the ED course-based high school curriculum, by family income, socioeconomic status, total number of credits earned in AP or IB courses, and postsecondary status a year later: 2004

					Three years of		
				Three years of	Three years of science (including		
		All course work		mathematics	at least two		
		requirements		(including	courses from		One year of
		except for		algebra I	biology,	Three years of	language
	All course work	foreign	Four years	and a higher-	chemistry,	social	other
Characteristic	requirements ^a	language	of English	level course)	or physics)	studies	than English
Total	43.8	46.4	80.2	79.3	62.0	91.5	81.2
Family income ^b							
\$35,000 or less	33.8	37.4	81.5	73.4	49.4	90.2	72.5
\$35,001-\$75,000	43.2	45.7	79.5	78.4	63.0	92.2	80.8
More than \$75,000	55.3	29.7	80.0	87.0	73.9	92.1	6.06
Family income ^b							
\$50,000 or less	36.1	39.3	80.7	74.1	53.4	9.06	74.5
More than \$50,000	51.3	53.2	79.8	84.4	70.4	92.5	87.7
Socioeconomic status							
Lowest quartile	30.3	34.3	6.08	9.69	45.8	89.1	68.5
Second quartile	37.4	39.9	79.4	74.2	54.8	91.0	75.7
Third quartile	45.7	48.4	80.0	82.0	65.5	92.8	84.7
Highest quartile	58.3	9.65	80.7	89.0	78.0	92.7	92.8
Total AP/IB course credits ^c	Jits ^c						
Two or more	72.0	72.8	84.9	95.4	88.9	95.7	98.4
Less than two	37.6	40.5	79.2	75.8	56.1	9.06	77.4

Cont'd. next page. See notes at end of table.

Percentage of high school graduates who completed the ED course-based high school curriculum, by family income, socioeconomic status, total number of credits earned in AP or IB courses, and postsecondary status a year later: 2004—Continued Table F-1.

					Three vears of		
				Three years of	science (including		
		All course work		mathematics	at least two		
		requirements		(including	courses from		One year of
		except for		algebra l	biology,	Three years of	language
	All course work	foreign	Four years	and a higher-	chemistry,	social	other
Characteristic	requirements ^a	language	of English	level course)	or physics)	studies	than English
Full-time postsecondary education participants ^d	y education partici	pants ^d					
Total	59.2	8.09	82.2	90.1	78.6	93.6	93.9
Family income ^b							
\$50,000 or less	54.3	56.2	83.5	87.6	73.2	93.2	91.5
More than \$50,000	62.3	63.7	81.4	91.7	82.0	93.8	92.5
		Amo	ong full-time stude	nts entering a fou	Among full-time students entering a four-year institution first	rst	
Total	66.5	67.5	83.1	6.56	85.2	94.4	97.4
Family income ^b							
\$50,000 or less	63.4	64.5	84.4	91.9	82.4	94.2	9.96
More than \$50,000	68.1	0.69	82.4	94.9	86.7	94.5	97.8
		Amo	ong full-time stude	nts entering a tw	Among full-time students entering a two-year institution first	st	
Total	40.4	43.4	80.1	80.3	61.2	91.3	85.1
Family income ^b							
\$50,000 or less	39.1	42.0	82.2	80.5	57.1	91.4	82.5
More than \$50,000	41.8	44.8	77.9	80.1	65.5	91.3	87.8

Requirements include four years of English, three years each of mathematics (including algebra I and higher), science (including at least two courses from biology, chemistry, or physics), social studies, and one year of foreign language.

that records at least 16 course credits with a positive nonzero number of credits completed in English).

^b Parents' reported total family income from all sources in 2001.

^c "Course credits" refer to standardized Carnegie units. A Carnegie unit is a standard of measurement used for secondary education that represents the completion of a course that meets one period per day for one year.

d High school graduates who entered postsecondary education within one year after completing high school and enrolled in a full-time degree program (however, the type NOTE: The sample of this table includes high school graduates who received a regular, regents, or honors diploma and had a complete set of transcripts (defined as one of degree program is unknown).

Percentage of high school graduates who completed a rigorous high school program as defined in the State Scholars Initiative, by family income, socioeconomic status, total number of credits earned in AP or IB courses, and postsecondary status a year later: 2004 Table F-2.

Characteristic	Rigorous high school programs defined in the State Scholars	Four years	Three years of mathematics (including algebra I and II and	Three years of lab science (biology, chemistry, and physics)	Three and a half years of social studies (U.S. and world history, world geography, economics, and government)	Two years of language other than
Total	10.5	80.2	53.7	40.7	40.0	65.5
Family income ^b \$35 000 or less	7. 7.	<u>α</u> π	47.4	28 C	40.2	53.0
\$35,001-\$75,000	10.4	79.5	54.4	40.8	38.8	65.5
More than \$75,000	13.8	80.0	59.3	53.4	41.7	78.6
Family income ^b						
\$50,000 or less	6.7	80.7	49.3	31.4	39.8	55.9
More than \$50,000	13.0	79.8	58.0	49.7	40.2	74.8
Socioeconomic status						
Lowest quartile	6.5	80.9	43.4	23.6	40.5	48.7
Second quartile	8.2	79.4	48.9	34.0	38.6	58.3
Third quartile	10.5	80.0	58.3	42.5	39.0	69.4
Highest quartile	15.6	80.7	61.7	58.5	41.9	4.18
Total AP/IB course credits ^c						
Two or more	23.6	84.9	63.5	75.2	53.0	92.7
Less than two	9.7	79.2	51.6	33.2	37.2	59.5
Full-time postsecondary education participants ^d	cation participants ^d					
Total	15.4	82.2	65.1	57.7	41.9	82.5
Family income ^b						
\$50,000 or less	13.1	83.5	64.4	49.3	42.8	76.6
More than \$50,000	16.8	81.4	65.5	63.1	41.4	86.2
	0140+					

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family income, socioeconomic status, total number of credits earned in AP or IB courses, and postsecondary status a year later: 2004 Percentage of high school graduates who completed a rigorous high school program as defined in the State Scholars Initiative, by -Continued Table F-2.

					Three and a half	
	Rigorous		Three years of	^	years of social studies	
	high school		mathematics	Three years of	(U.S. and world	
	programs		(including	lab science	history, world	Two years of
	defined in the		algebra I	(biology,	geography,	language
	State Scholars	Four years	and II and	chemistry,	economics,	other than
Characteristic	Initiative ^a	of English	geometry)	and physics)	and government)	English
		Among fu	III-time students er	Among full-time students entering a four-year institution first	stitution first	
Total	18.2	83.1	68.3	9.99	43.1	88.6
Family income ^b						
\$50,000 or less	16.6	84.4	2.69	9.09	43.7	85.3
More than \$50,000	19.1	82.4	67.5	2.69	42.8	90.3
		Among fu	III-time students er	Among full-time students entering a two-year institution first	titution first	
Total	7.9	80.1	6'99	34.7	38.8	2.99
Family income ^b						
\$50,000 or less	7.1	82.2	55.7	29.7	41.2	61.4
More than \$50,000	6.8	6.77	58.3	40.0	36.2	72.2

Requirements include four years of English; three years of mathematics (including algebra I and II and geometry); and of lab science (biology, chemistry, and physics); three and a half years of social studies from U.S. and world history, world geography, economics, and government; and two years of language other than English.

^b Parents' reported total family income from all sources in 2001.

NOTE: The sample of this table includes high school graduates who received a regular, regents, or honors diploma and had a complete set of transcripts (defined as one that records at least 16 course credits with a positive nonzero number of credits completed in English).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:02)

^c "Course credits" refer to standardized Carnegie units. A Carnegie unit is a standard of measurement used for secondary education that represents the completion of a course that meets one period per day for one year.

d High school graduates who entered postsecondary education within one year after completing high school and enrolled in a full-time degree program (however, the type of degree program is unknown).

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APPENDIX G

Supplemental Tables on ACG and National SMART Grant Program Participation by State in 2006–07

Table G-1. Number of first- and second-year students with Pell Grants and ACGs and percentage of Pell Grant recipients with ACGs, by state of student's residence: 2006–07

	Number of	Percent of firs	
	first- and second-year	Number of Pell Grant	and second- year Pell Grant
residence	Pell Grants	with ACGs	with ACGs
Total	2,940,492	299,701	10.2
Alabama	51,008	3,356	6.6
Alaska	3,814	126	3.3
Arizona	47,606	1,382	2.9
Arkansas	39,486	3,881	9.8
California	306,339	29,870	9.8
Colorado	36,515	3,100	8.5
Connecticut	22,056	2,235	10.1
Delaware	6,285	381	6.1
District of Columbia	3,784	406	10.7
Florida	161,977	15,098	9.3
Georgia	94,914	9,428	9.9
Hawaii	6,999	614	8.8
Idaho	15,226	1,542	10.1
Illinois	119,461	10,130	8.5
Indiana	70,767	7,561	10.7
Iowa	34,047	3,578	10.5
Kansas	26,288	2,775	10.6
Kentucky	52,927	4,642	8.8
Louisiana	45,303	6,318	13.9
Maine	11,916	2,029	17.0
Maryland	39,347	3,815	9.7
Massachusetts	42,589	6,769	15.9
Michigan	120,113	6,163	5.1
Minnesota	48,001	5,584	11.6
Mississippi	50,334	3,438	6.8
Missouri	56,910	5,029	8.8
Montana	10,117	1,117	11.0
Nebraska	19,429	3,039	15.6
Nevada	7,759	663	8.5
New Hampshire	7,508	1,052	14.0
New Jersey	65,453	8,014	12.2
New Mexico	25,500	1,075	4.2
New York	200,092	24,206	12.1
North Carolina	94,639	10,339	10.9
North Dakota	6,837	1,039	15.2
Ohio	130,778	14,291	10.9
Oklahoma	38,354	4,328	11.3
Oregon	31,465	2,339	7.4
Pennsylvania	100,173	15,962	15.9
Puerto Rico	97,988	11,571	11.8
Rhode Island	7,847	803	10.2

Cont'd. next page. See notes at end of table.

Table G-1. Number of first- and second-year students with Pell Grants and ACGs and percentage of Pell Grant recipients with ACGs, by state of student's residence: 2006–07—Continued

	Number of		Percent of first-
	first- and second-year	Number of Pell Grant	and second- year Pell Grant
residence	Pell Grants	with ACGs	with ACGs
South Carolina	49,844	5,202	10.4
South Dakota	8,482		14.5
	•	1,232	-
Tennessee	59,854	5,919	9.9
Texas	256,210	28,704	11.2
Utah	21,834	689	3.2
Vermont	4,947	759	15.3
Virginia	54,678	5,412	9.9
Washington	47,107	3,356	7.1
West Virginia	18,238	1,660	9.1
Wisconsin	47,357	6,126	12.9
Wyoming	4,050	359	8.9
All others	9,940	1,195	12.0

NOTE: This table is based on unduplicated records. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions and greater than 5 at four-year institutions were excluded from the numbers presented by class level.

Table G-2. Number of first- and second-year students at two-year institutions with Pell Grants and ACGs and percentage of Pell Grant recipients with ACGs, by state of student's residence: 2006–07

	Number of		Percent of first-
	first- and second-year	Number of Pell Grant	and second- year Pell Grant
residence	Pell Grants	with ACGs	with ACGs
Total	1,525,631	37,768	2.5
Oklahoma	18,261	1,008	5.5
Florida	55,076	3,006	5.5
Wyoming	2,781	149	5.4
North Dakota	2,421	128	5.3
Texas	151,942	7,888	5.2
Nebraska	10,610	465	4.4
Montana	2,880	121	4.2
Arkansas	20,246	814	4.0
Alabama	28,064	1,070	3.8
Tennessee	27,797	1,058	3.8
Louisiana	17,045	618	3.6
Mississippi	37,296	1,337	3.6
South Dakota	2,543	89	3.5
New York	91,791	3,181	3.5
Kansas	14,953	487	3.3
District of Columbia	418	13	3.1
New Jersey	37,213	1,135	3.1
Puerto Rico	15,354	461	3.0
Missouri	28,404	820	2.9
New Hampshire	2,784	76	2.7
All others	4,683	123	2.6
South Carolina	28,768	704	2.4
Pennsylvania	47,132	1,059	2.2
North Carolina	57,262	1,229	2.1
Virginia	30,459	631	2.1
Minnesota	26,864	556	2.1
Wisconsin	25,177	511	2.0
Maine	4,063	82	2.0
Maryland	22,762	452	2.0
Georgia	40,935	766	1.9
Massachusetts	22,685	407	1.8
Iowa	21,881	383	1.8
Alaska	321	5	1.6
Indiana	30,267	468	1.5
Ohio	67,295	1,035	1.5
Illinois	71,084	1,084	1.5
Idaho	4,396	66	1.5
West Virginia	5,732	82	1.4
Delaware	3,537	47	1.3
Hawaii	2,928	36	1.2
Kentucky	27,972	317	1.1

Cont'd. next page. See notes at end of table.

Table G-2. Number of first- and second-year students at two-year institutions with Pell Grants and ACGs and percentage of Pell Grant recipients with ACGs, by state of student's residence: 2006–07

—Continued

	Number of		Percent of first-
	first- and	Number of	and second-
	second-year	Pell Grant	year Pell Grant
State of student's	students with	students	students
residence	Pell Grants	with ACGs	with ACGs
Oregon	21,272	233	1.1
California	210,343	2,244	1.1
New Mexico	10,595	111	1.0
Utah	6,517	67	1.0
Vermont	2,151	22	1.0
Nevada	2,071	21	1.0
Arizona	31,987	238	0.7
Michigan	62,413	457	0.7
Washington	29,276	207	0.7
Connecticut	12,572	82	0.7
Colorado	18,502	102	0.6
Rhode Island	3,850	17	0.4

NOTE: This table is based on unduplicated records. Class level is institution-reported for ACGs and SMART Grants, but student-reported for Pell Grants. Student-reported class levels greater than 2 at two-year institutions were excluded. SOURCE: U.S. Department of Education, Office of Federal Student Aid, COD-CPS Interface Grant Recipient File AY0607 (Sept. 21, 2007).

